

MANUFACTURERS' RECORD

A WEEKLY REVIEW OF THE IRON, STEEL, METAL & HARDWARE TRADES.

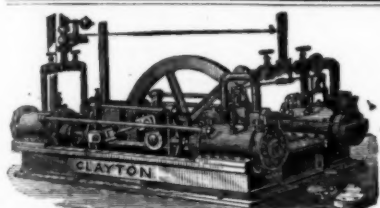
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Vol. 6. No. 3.

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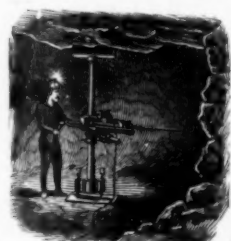
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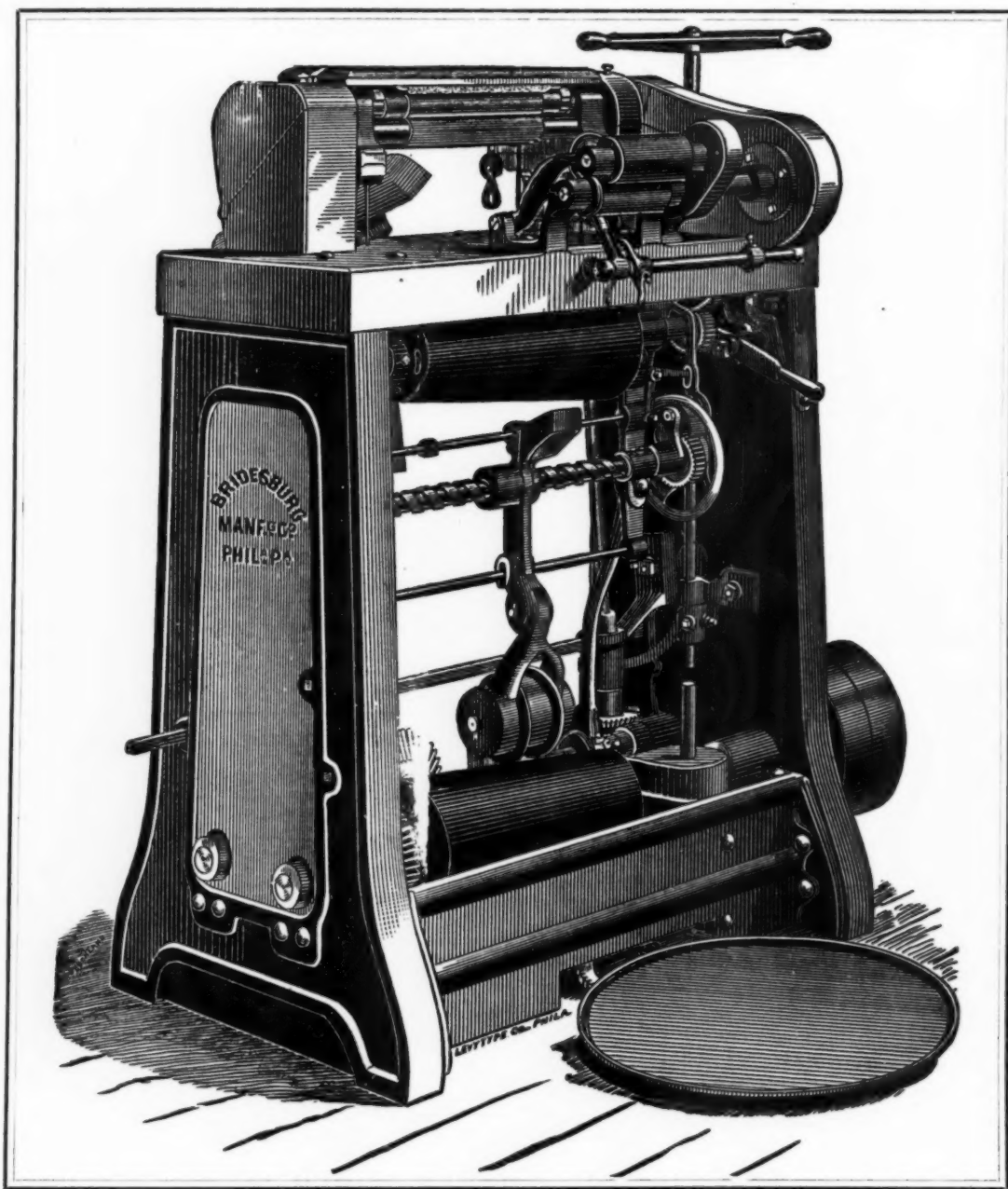
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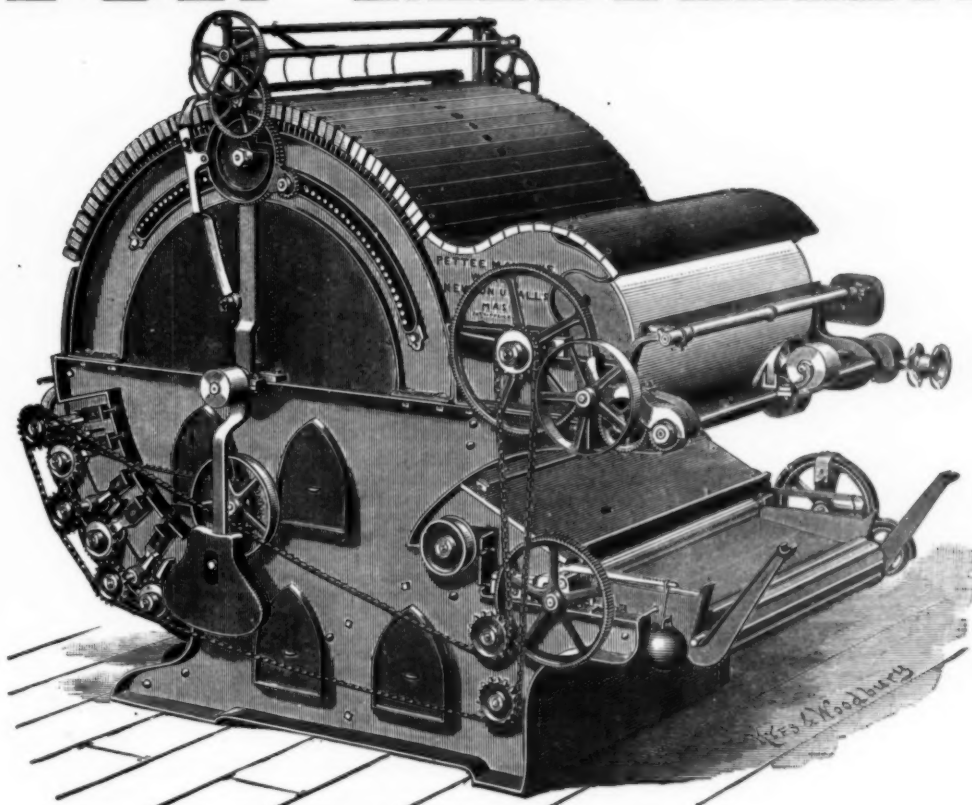
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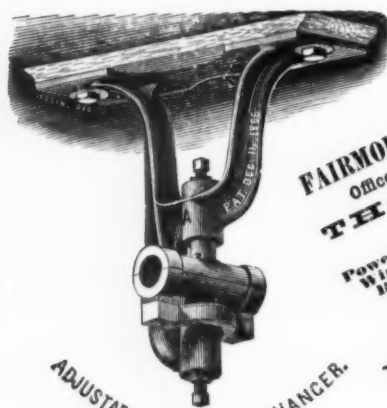
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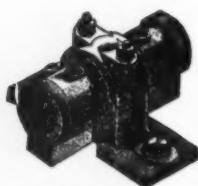
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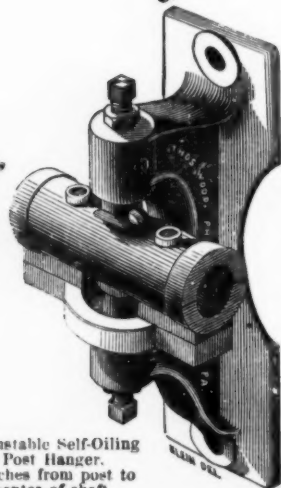
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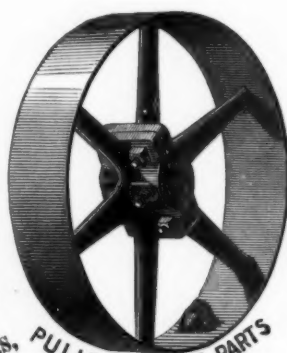
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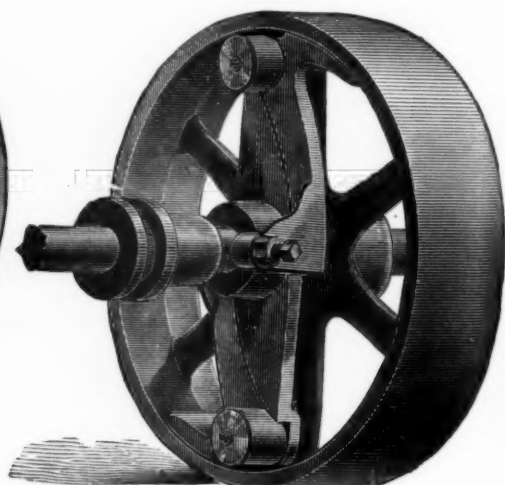
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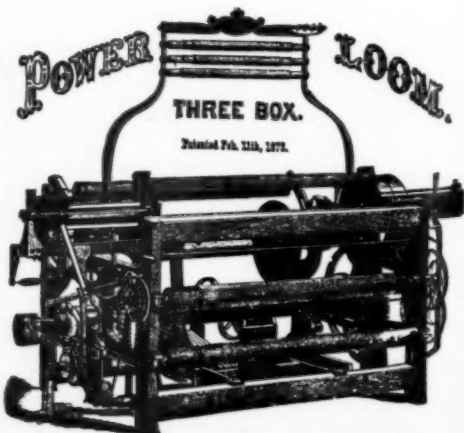
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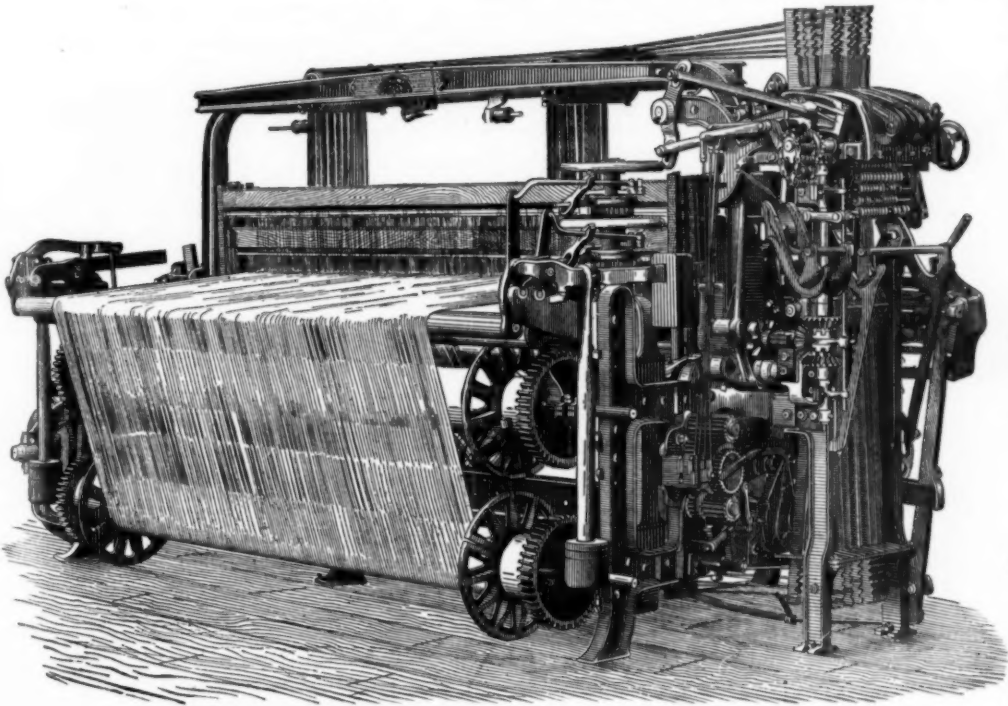
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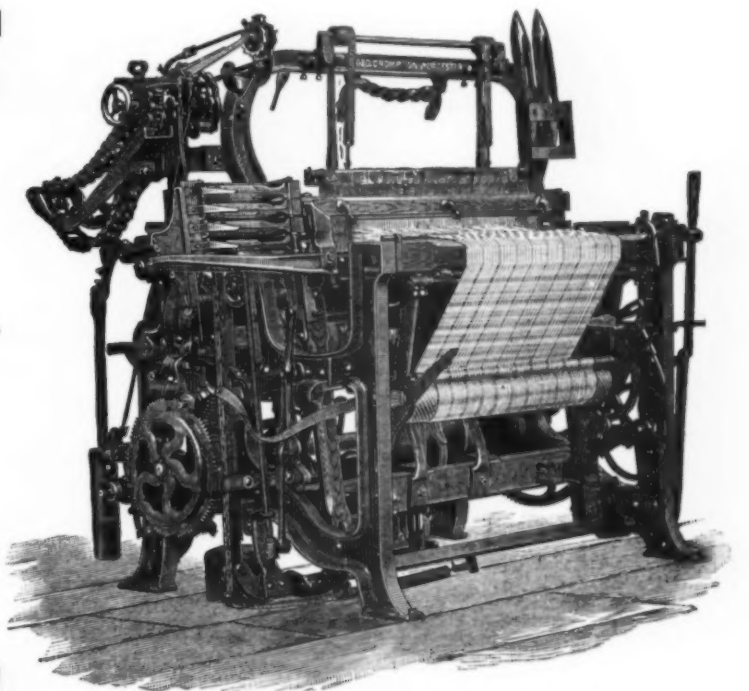
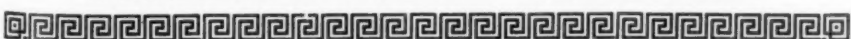
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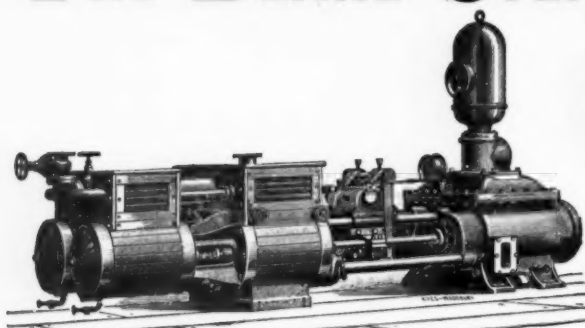


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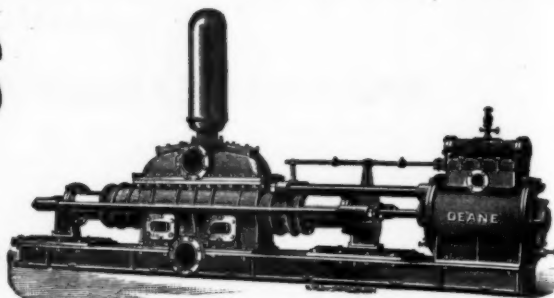
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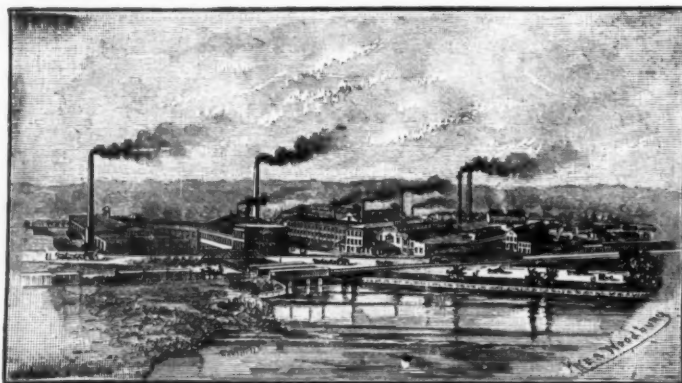
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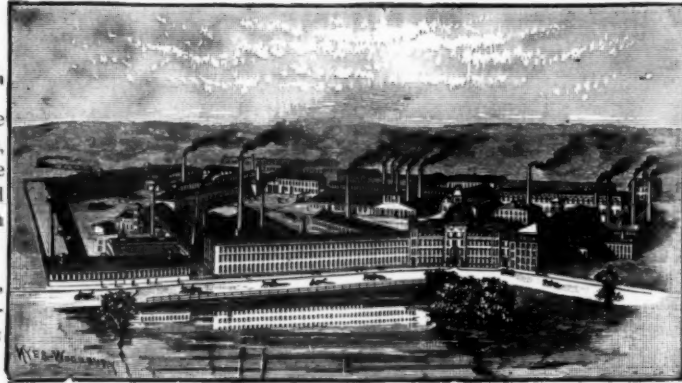
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BALTIMORE, AUGUST 30, 1884.

A Year of Plenty.

The crop prospects at the South are as we have repeatedly said, unusually fine, and business in all lines will doubtless feel the good influence of the heavy yields. The Atlanta Constitution says:

The crops this year are unexampled. In abundance, variety and excellence they are without parallel. It is truly a year of plenty. In cotton, grasses, corn, fruit, vegetables the yield has been enormous, and Georgia soil has never given such harvests.

Will the surplus we have made be prudently gathered and carefully husbanded? We fear not. The Georgia farmer is not a great saver. The very affluence of his soil and the mildness of his climate has made him careless and lavish. It is hardly too much to say that millions of bushels of peaches will rot on the trees in Georgia this year, and millions of dollars be sent out of the State next winter to buy canned and preserved peaches from the North. Rich and succulent grasses will waste by the thousands of tons for the lack of curing, and our stock be wintered on western hay at \$20 a ton. Even corn itself will be fed lavishly or wasted, and next year the farmer will buy corn of his commission merchant and pay forty per cent. interest on the money.

There is no computing the value the rich crops of this year would be to Georgia if they were prudently used and the surplus carefully put away. Many a farmer will make enough corn to do him for two or three years, and fodder, that if cured properly would be sweet and wholesome food for his cattle four years hence. If there were ensilage pits on each small farm, they might be filled this season and enough forage laid away at a nominal cost to carry forty or fifty cattle

through the winter. If our surplus peaches, pears, tomatoes, berries, and vegetables were preserved or canned or pickled, we would keep millions of dollars at home next winter that is now sent away for the refuse of other markets. If our grasses were cured and packed, we should not have train loads of western hay draining our farmers' pockets and impoverishing our State next fall.

The barn is the important feature in Georgia's farm economy this year. The hay-rick, the ensilage pit, the fodder-stack, the preserves closet, are the points to which the Georgia farmer should address himself. The crops are assured in exceeding fullness and variety. Man and beast cannot possibly exhaust them. It is a simple question as to whether the enormous surplus will be wasted or saved. If it is saved, it will stand as a resource against the possible short crops of two or three years. If wasted, this grand harvest that providence seems to have exhausted itself on, will result in simply a short season of lavish extravagance, and then empty barns, poor stock, and another season of dependence. That man is the benefactor now, who leads the way in saving the surplus of the season's richness, and who makes plain the methods by which the produce not needed for the present, can be stored away cheaply and safely, to supplement the harvest of the poor seasons that must follow this wonderfully rich one.

Wages Under Protection and Free Trade.

It is, we believe, admitted by every one, that the condition of the laboring people is better in the United States than in any other country in the world. In no other country are they so well paid, and hence they enjoy more of the comforts and pleasures of life here than anywhere else. This favorable state of affairs is, of course, very largely due to our protective tariff; abolish that and very soon American laborers would have to content themselves with the same style of living as the great mass of European laborers. The Journal, of Boston, in a late issue, presents some interesting facts upon this question, many of which have from time to time appeared in our columns, but they are well worthy of constant repetition. The Journal says:

The Globe knows that the suspension in a large number of cotton mills is but temporary—to last from two to four weeks at most. It is, therefore, trying to make things a great deal worse than they really are, and very different from what they were when, a few weeks since, it gave such glowing promises of business improvement. And this suspension the Globe attributes to the policy of protection. How, then, does it account for the fact that a comparatively large number of cotton mills in England have closed permanently, and that in one

instance a large mill has been taken down within a few months? The depression in any manufacturing industry in Great Britain is very much more severe than it is in this country. The lack of employment is much more general. There, under free trade, one person in 26 is an absolute pauper. There labor is such a drug that assisted emigrants are sent to America in order to get rid of them. The Globe asks the laboring man if he has not been compelled to compete with labor from whatsoever source it has come? What does it mean? The laborer in this country competes with his fellows in this country, but not with those abroad. His wages are from 45 to 90 per cent. higher here because he does not compete with the foreign laborer. Suppose that we go to actual free trade, is it probable that the wages of the laboring man would be as high as now? It is out of the question. To compete with foreign manufacturers, our manufacturers must cut their wages to the same figure paid abroad, or go out of business. That is a statement that needs no demonstration, because it is a self-evident truth—a fact on its face. We give, for the benefit of those who are seeking for facts, the table taken from the report of the Bureau of Statistics, which shows the comparative wages in Massachusetts and Great Britain in the same industries:

Industries.	Mass.	Great Britain.	Per cent. higher in Mass.
Agricultural Implements.....	\$10 25	\$8 85	15.8
Artisans' tools.....	11 80	4 89	141.3
Boots and shoes.....	11 63	4 37	166.1
Brick.....	8 63	4 15	107.5
Building trades.....	14 99	7 21	107.9
Carpetings.....	6 08	4 11	47.9
Carriages and wagons.....	13 80	4 89	182.2
Clothing.....	10 01	6 71	49.1
Cotton goods.....	6 45	4 66	38.4
Flax and jute goods.....	6 46	2 84	127.5
Food preparations.....	9 81	2 72	260.7
Furniture.....	11 04	7 96	38.7
Glass.....	12 28	6 94	76.09
Hats; fur, wool and silk.....	11 01	5 51	99.8
Hosiery.....	6 40	4 67	39.0
Liquors; malt and distilled.....	12 37	12 65	1.7
Machines and machinery.....	11 75	6 93	69.0
Metals and metallic goods.....	11 25	7 49	52.0
Printing and publishing.....	11 37	5 52	106.0
Printing, dyeing, bleaching, and finishing, cotton textiles.....	8 67	4 94	75.5
Stone.....	14 39	8 58	67.7
Wooden goods.....	12 19	5 67	115.0
Woolen goods.....	6 90	4 86	42.0
Worsted goods.....	7 32	3 60	103.3
All industries.....	\$10 31	\$5 86	75.94

With a duty which keeps the foreign manufacturer from equal competition with the manufacturer here the above wages are paid. Is there in the Globe office a man who will assume that the same relative wages will or can be paid if that duty is removed and competition is free? Again, if our cotton and woolen industries were developed to the extent that we could have produced the \$32,359,000 worth of cotton goods and the \$40,000,000 worth of woolen goods bought abroad, we should have ample employment for all our population, and all the capital employed therein.

Our readers will confer a favor upon our advertisers and upon us, as well as benefit themselves, if, whenever they write to anyone advertising in this paper, if it is only for a catalogue, they mention that "your advertisement was seen in the BALTIMORE MANUFACTURERS' RECORD." A careful compliance with this request will be much appreciated.

What the Sugar Planters Think.

The sugar planters and others in Louisiana engaged in protected industries are very decided in their protective tariff views, and at a general meeting held on August 20, adopted the following:

Resolved, That this convention favors protection as a principle to be accorded by the government to all home industries and home labor, in whatever way it can be most effectively given.

Resolved, Whereas, the Government of Great Britain has heretofore entered into treaty with the United States, dated 1815, under which the colonial possessions of Great Britain in the West Indies and Guinea are exempt from obligations of the most favored nation clause in any treaty between the United States and other countries,

And whereas, the government of Great Britain is desirous of subrogating such colonial productions to the benefits of the treaty between the United States and the Sandwich Islands, Mexico, or any other countries, proposes to procure the removal of colonial disability referred to; therefore,

Resolved, that our senators in Congress are hereby respectfully requested to resist any such modifications of existing treaties with Great Britain as would admit sugar, molasses, or other tropical products of said colonial possessions duty free into the markets of the United States.

Protection is rapidly gaining ground all over the South, and the politicians who attempt to ignore this fact will find that they have made a very serious mistake. The South needs protection,—needs it far more in fact than any other section of our country. With a continuance of our protective tariff, the Southern States will continue to increase in population and wealth, and her industrial and agricultural interests will alike share in this increased prosperity; but if the protective features of our tariff are abolished or cut down, the South will feel the disastrous effects sure to follow such a step, more even than New England.

CORRESPONDENCE relating to the manufacturing, mining, lumbering and all other material interests of the Southern States is solicited. We invite those interested in the development of the South to make free use of our columns. Reaching so many capitalists in all parts of the United States seeking profitable investment in the South, the MANUFACTURERS' RECORD offers an excellent chance for the people in that section to place the advantages of each locality before those likely to be interested. We will take great pleasure at all times in telling what has already been accomplished in the South, and showing up the opportunities of doing still more,—so if you desire to attract immigration or capital, or if you know of an opening for profitable investment in manufacturing, mining or kindred pursuits, write us an account of it. It will be published free of cost.

ADVERTISERS wishing to reach the manufacturers of all classes, mining companies, steel, iron and hardware dealers of the entire South, cannot find a better medium than the BALTIMORE MANUFACTURERS' RECORD. We are always prepared to furnish proof of our claims as to circulation.

Elliott's Improved Drill Press

is a comparatively new tool for light and medium drilling, which has many points of merit worth looking into.

Its maker is one of the men who think life is too short to waste in doing work other than by the quickest method that will make it right.



View showing inside of driven cone, and the lever connection inside the column.



CENTERING ATTACHMENT FOR DRILL PRESS.

How this tool came to have an existence forms the "preface" of a neat catalogue, which we commend for its brevity. As somewhat of a novelty we give the preface here verbatim:

PREFACE.

When I started a machine shop I wanted a Drill Press That would do a wide range of light work. I couldn't buy it For two reasons. First, it was not in the market, Second,—well, never mind. I got along for the time without it. Finally I made one. Have got it yet. It works well. Tiptop. Then I made a better one And sold it, And then several others. Then I improved it some more And sold a good many. "Good many" is ambiguous, but it saves lying. While making and selling Drill Presses I kept my eyes open

To find out what was wanted.

I have found out.

Have made it.

Here it is.

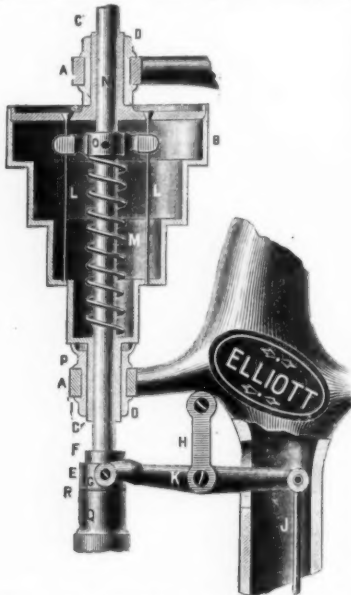
Look it over.

Perhaps you may want one.

A lever "feed" has long been considered by machinists as not only the quickest, but the best for light drilling.

In former lever drill presses in which the drill moved down, as is proper, the lever has been located above the work, and in such cases where the work moved up, as is not proper, the lever even if it is properly located, has too much weight to raise, which prevents the workman "feeling" the cut of his drill, and is about as tiresome as to hold the arm up. We believe the Elliott Drill Press is the first to feed the drill down from above the work, by a lever located below the table, where it may be best controlled.

It is a well-known fact that the breaking of a small drill usually occurs just as its point comes through the work, and is caused by the drill chuck and spindle dropping a



Enlarged view of interior of Driven Cone, showing the spindle, its driver, and the counterbalance spring.

distance equal to whatever lost motion there is between the spindle and its driver.

In the press here shown, this lost motion is taken up by a steel spiral spring which acts as a counter-balance to the weight of chuck and spindle.

Upon the upper end of spindle is a clamp collar which may be adjusted to any point to serve as a positive stop, to limit the descent of spindle, as in counter-boring, &c.

The column is slotted on one side, and has a spring stud attached to the table arm, resting in this slot, the effect of which is to cause the center of table to move exactly in line with center of drill spindle; upon withdrawing this stud, the table may be swung round the column, and the table may also be turned round its own centre; the hand lever is adjustable both as to length and location, and the foot lever may be used or not, as required.

The head cone runs in composition boxes, and the spindle moves inside the sleeves of cone, and not in the boxes, thus insuring durability; both cones are turned outside and in, and carefully balanced, and the entire tool is first-class both in material and workmanship. It is fully guaranteed by the maker, Sterling Elliott, whose address is Newton, Mass.

THE "Palace Hotel," in Cincinnati, is appropriately named. In the magnificence of the building, and in the elegance of its appointments throughout, it resembles a palace. It has all the attributes of a first-class hotel, and travelers cannot find anywhere a more desirable stopping place. Its meals are about all that could be desired; its attendants are courteous and accommodating; and in all respects the comfort of its guests is carefully looked after.

Is the Independence of Industries Established?

A Philadelphia correspondent of Bradstreets, Lorin Blodgett we suspect, in discussing the independence of our industries in the last issue of that journal, says:

The question of the day is not so much whether there shall be new legislation as to duties on imports as it is whether the independent development of the leading industries has been secured in accordance with the wishes and efforts of those who have made efforts to secure this result. For almost a full century the encouragement of manufactures here has been an avowed object in tariff legislation—one of the objects, but not the only one. The first Congress of 1789 declared in the first section of the first tariff act, July 4, 1789, that, "whereas, it is necessary for the support of the government, for the discharge of the debts of the United States, and for the encouragement and protection of manufacturers that duties be laid on goods, wares and merchandise imported," and proceed to give a schedule of such duties in detail. The system at the outset was derived from English precedents, and was substantially English. The general provisions of the English law relating to shipping and navigation were embodied soon afterward in a general act establishing like laws for the United States, and for organizing here a general system of customs administration for this country, the districts being elaborately defined, and much of this framework remains with little change to the present time. It was a reproduction here of the vigorous national spirit then characteristic of English Law, and it helped us much in building up the distinctive identity of our own nation.

The founders of this government, we repeat, did not attempt to create a new system of tariff and customs organization. They reproduced the text of English statutes and the vigorous spirit of the English administration, which at that time was extremely rigid and restrictive. No competitors were admitted, either in trade or in navigation, unless by special treaty or an exchange of favors. The importation of goods and the navigation of the seas was each contested without the admission of any abstract rights, and this intensely national spirit was reflected from the British original in every part of the framework prepared by Alexander Hamilton in his entire course, and his controlling influence while Secretary of the Treasurer. Congress adopted most of his recommendations, and in each successive act from that of July 4, 1789, forward, the tendency was always toward higher duties and more decisive restrictions and limitations. The need of revenue was urgent, but the need of a vigorous spirit was equally recognized, and it cannot be denied that the commercial and maritime growth of that period was wonderful.

The relation of the tariff acts then and subsequently enacted forms an instructive schedule of acts and rates of duty, as follows:

SYNOPSIS OF AVERAGE TARIFF RATES.	
Acts of	Average rate, per cent.
1789, July 4.....	8 1/2 ..First general tariff.
1790, August 10.....	11 ..General increase, 2 1/2 per cent.
1791, March 3.....	— ..Small increase on spirits.
1792, May 2.....	13 1/2 ..General increase.
1794, June 5.....	— ..Specific additions.
1795, January 29.....	— ..Specific additions.
1797, Mar. 3 and July 8, 16	— ..Specific additions.
1800, May 13.....	18 ..General increase.
1804, March 22.....	20 ..General increase.
1807, March 3.....	— ..Repeal of salt duty.
1808, March 4.....	19 ..Repeal of duty on sulphur, saltpeter, etc.
1812, July 1.....	38 to 50 ..Double existing duties.
1813, July 29.....	— ..New duty on salt.
1815, March 3.....	— ..Repeals discriminating duties on British vessels.
1816, February 5.....	— ..Confirms double duties of 1812.
1816, April 27.....	30 ..General, with reductions.
1818, April 20.....	— ..Specific reductions.
1819, March 3.....	— ..Specific reductions, small.
1824, May 22.....	35 ..General and new increase.
1828, May 19.....	40 to 42 ..General increase large.
1828, May 24.....	— ..Small change.
1830, May 20.....	— ..Reduced on tea, molasses, etc.
1832, July 13.....	40 ..Reduced on wines, general.

1833-1841, March 2.....	35 to 25 ..Reduction by successive steps of 10 to 15 per cent. each.
1842, August 30.....	32 ..New and general.
1846, July 30.....	25 1/2 ..New and general.
1857, March 2.....	20 ..Schedules of 1846 reduced.
1861, March 2.....	33 ..Entire change.
1861, Aug. and Dec.....	35 ..Increase of items.
1862, July 14.....	37 1/2 ..General increase.
1863, March 3.....	— ..Slight changes.
1864, June 30.....	50 to 48 ..General increase.
1865, March 3.....	— ..Small changes.
1866, July 28.....	— ..Small increase.
1867, March 2.....	— ..Slight changes.
1869, February 24.....	— ..Copper, and ores of.
1870, July 14.....	45 ..General reduction.
1872, June 6.....	40 ..General reduction.
1875, February 8.....	42 ..Increase, partial.

The subsequent changes of the customs laws nearly compensate each other, and leave the rate of duty paid at an average of 42 per cent. on the imports paying duty, and at 30 per cent. on the total value of imports, including an average of \$200,000,000 in value free of duty. This is somewhat higher nominally than it is really, because of the great decline in prices of all classes of merchandise, the average price per unit of quantity being scarcely more than half the price of fifteen years ago. This is true of the leading classes of manufactured goods, woolen, silks, cotton, steel and most other metals, sugar, coffee, rice, and all competing as well as non-competing products.

This schedule shows the principle that has run through the tariff legislation of the country, the rates being advanced by slow gradations in the early period until 1828 they reached the present average, and represented then, as now, the highest demand conceded to the principle of encouraging manufactures. Higher rates were enacted in the war tariffs of 1812 to 1816, as well as those of 1861 to 1865, but these were in both cases voluntarily relinquished in the legislation of the first Congress following the war of 1812-15, a step that proved a mistake, and was not repeated in 1866 to 1869.

At the present distance in time from the late war, however, there has been enough of subsidence to bring us to purely normal conditions. In respect to prices particularly the decline from what may have been the exaggerated values of 1863 to 1873 is the most remarkable of historic changes. There should not be any smaller measure for anything. Wheat and all agricultural products are at the lowest limit of safety, and if such prices cannot move them to other markets it will be better to cease looking to Europe for their consumption as a national resource.

And the prices for manufactured articles, especially iron, steel and the metals, could not well be lower and little of either can be imported. Textile fabrics alone almost, among the great classes of manufactured goods, present a margin in price that permits of profitable importation. By steady attention to the art of importing these the provisions of the tariff have been less obstructive, and they actually get in at rates of duty 7 to 10 per cent. below those nominally paid. The margin is narrow, and proprietors in Europe must send the goods to agents here; buyers cannot go from the United States to buy for themselves.

The existing rates of duty on imports may therefore be reviewed in the light of purely normal conditions and from a point that assumes the substantial equality of this country with other countries. The greater industries have grown to such proportions as to command much the larger share of our great consuming markets; it is so in iron, steel, copper, and all the leading metals; it is equally so in manufactures of wool, cotton and finally of silk. Through the invention and perfection of machinery the door has been opened to a degree of success in manufactures of the most costly and difficult class, which was not expected until the change came.

We do not care to renew any degree of the dependence before existing on the supply of needed fabrics from European instead of domestic sources. We do not need to do so in order to build our commercial and industrial policy on a broader basis than before, retaining the protection that our industries actually need, but removing such obstructions

as have grown up in the special series of legislative acts required by the disturbed period, 1861 to 1870.

Few of those who advocated the encouragement of manufactures as one of the objects of tariff legislation in the first three-quarters of the century would have then believed that the protective scale would rise so high as it has, or would remain so high as the average of existing rates. The great advocates of protection in the past were familiar with much lower rates, with the maximum of 40 per cent. in 1828 and the low averages of 1834 to 1860, when rates of 25, declining to 20 per cent. ruled for a long series of years. These were inadequate, and their consequences were disastrous, but the average of duties paid now is twice as great as from 1857 to 1861.

The present situation is a vindication of the policy of developing domestic industries. It shows that in the first century of our history there was a great work to do in establishing the greater industries here, as the population increased so as to demand immense supplies of manufactured fabrics. But it also shows a development vastly greater than was anticipated during the last quarter of century and the substantial completion of this greatest of changes in any nation's history.

List of Patents.

The following Patents were granted to citizens of the Southern States, bearing date Aug. 19, 1884. Reported expressly for this paper by Louis Bagger & Co., Mechanical Experts and Solicitors of Patents, Washington, D. C.

Batchelor, J. F., Baltimore, Md. Railway car.	303,791
Blakely, R. D., Oxford, Miss. Railway gate.	303,612
Cunningham, J. F., Wheeling, W. Va. Boat wheel.	303,819
Cusack, W. H., Nashville, Tenn. Metallic roofing shingle.	303,921
Fennerty, J. M., Memphis, Tenn. Car ventilator.	303,632
Hammond, Walter, Baltimore, Md. Keel for submarine boats.	303,843
Heller, R. M., Baltimore, Md. Separable button.	303,731
Hoke, Q. J., Yorkville, S. C. Baling press.	303,733
Howell, G. W., Covington, Ky. Wheel.	303,853
Ingram, J. H., Argus, Ala. Water-wheel.	303,642
Kiam, Benj., Houston, Texas. Combined satchel and pillow.	303,859
Lowrey, J. M., Jonesboro, Ga. Sash-fastener.	303,938
McAfee, J. C., Dallas, W. Va. Nut lock.	303,653
Roeder, Alexander, Morgan, Texas. Bridle.	303,751
Scott, Bertrand, Keyser, W. Va. Grain cleaner.	303,756
Shannon, J. J., Paris, Texas. Fork for handling cotton and other substances.	303,672
Tharp, W. B., Eagle Pass, Texas. Shawl strap.	303,896
Webb, R. W., Norfolk, Va. Bullet shield knapsack.	303,901
Willis, W. N., Trappe, Md. Air-brake.	303,777

A Grand Hotel.

We take great pleasure in calling the attention of our readers, and especially of those who do much traveling, to the merits of that most excellent hotel,—The Grand,—corner Broadway and 31st street, New York. This hotel, we very readily admit, will not suit the tastes of those who love a big, noisy crowd, but for those who prefer to have the very best of everything, and to enjoy a delightfully charming home-like place, where every comfort is secured, we know of no place that will suit better than The Grand. This hotel is a large eight story marble building, magnificently furnished from top to bottom, and supplied with every convenience for the comfort and pleasure of its guests. Every bed-room in the hotel, not excepting the smaller single rooms, have hot and cold water, handsome furniture, spotless bed linen and the softest and easiest of spring beds. The table is all that could be desired, its variety and excellence being abundantly sufficient to satisfy the most fastidious taste, while the cooking is as near perfection as that art usually reaches. One thing that is especially pleasant is the remarkable absence of even a speck of dirt anywhere in the building, every room and

in fact everything connected with the hotel, showing the most scrupulous neatness.

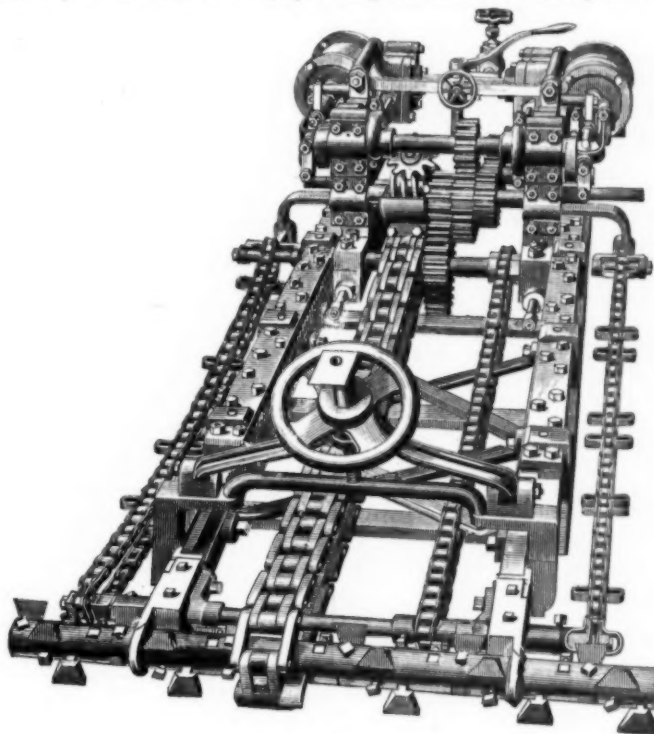
The Grand is situated in the most desirable place, not too far from the centre of business, and yet near enough to the uptown sections, to be an excellent starting point either way. It is one square from the elevated railroad, while numerous stage and street car lines pass its door.

The Legg Coal Mining Machine.

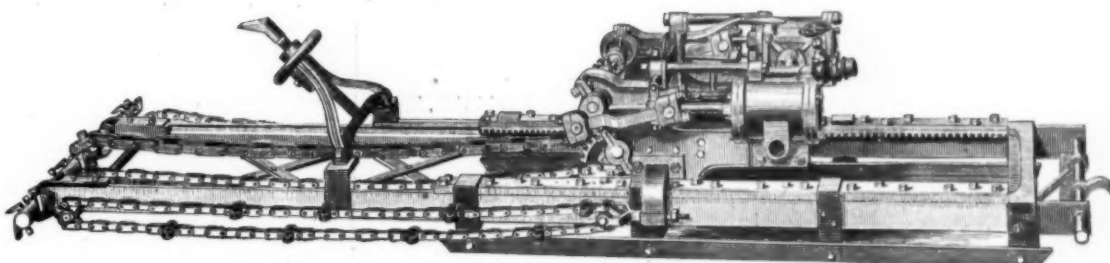
The Legg Coal Mining Machine consists of a bed frame, occupying a space 2 feet wide by 7 feet 6 inches long, composed of two steel channel bars firmly tied with iron braces, the top plates on each forming racks with their teeth downward, into which the feed wheels of the sliding frame engage. Mounted upon and engaging with this bed frame is a sliding frame similarly tied, consisting mainly of two steel T bars, upon

set and put in another. These should be changed from two to three times each day, and oftener if the cutting is hard and gritty. Any blacksmith who understands working steel can make them. The operation of the machine is about as follows: The machine is placed in front of the coal at one side of the room, on the floor of the mine; the cutter bar is then driven into the coal to a depth of about five feet, and by means of the reverse feed is withdrawn when the machine is moved over the length of the cutter-bar, and another cut is made; withdrawn again and set over as before, and so on continually, until the entire room is cut.

This machine, which is manufactured by the Lechner Manufacturing Co., Columbus, Ohio, has been thoroughly tested in the mines of Ohio, Pennsylvania and Illinois, and has proven very satisfactory. At a recent test of mining machines which took place at the mines of the Columbus & Hocking Coal and Iron Co., Longstreth, Ohio, the



THE LEGG COAL MINING MACHINE.



THE LEGG COAL MINING MACHINE.

which power is transmitted through straight gear wheels to the rack, by means of which the sliding frame is fed forward. Upon the front end of this sliding frame is mounted the cutter bar, held firmly by two solid steel shoes, with suitable brass bolts. The cutter bar contains 26 bits made of tool steel, held in place by set screws. When the cutter bar is revolved these cutters or bits cover its entire surface. The cutter bar is revolved by one endless steel chain from the driving shaft. The feed is thrown on and off by means of a lever. We are informed that the cut under the coal, 5 feet by 3 feet 6 inches, is made and the cutter bar withdrawn in from 4 to 6 minutes. The machine is easily handled by two men and will undercut from 500 to 800 square feet of floor per day of 10 hours. The construction of the machine is very simple, so that anybody of ordinary intelligence can understand and handle it with a few days instruction. Special pains have been taken to make the parts durable, so that, with ordinary care, they will last a long time. The bits are easily changed, requiring but about 10 minutes to take out one

Legg Machine was again victorious, having undercut nearly twice as much coal as the other machines in the same length of time, at less expense and trouble, in consequence of which this machine will be placed in this company's mines at Straitsville and Longstreth, Ohio. For further information and catalogue, address the Lechner Manufacturing Co., Columbus, O.

THE Lowell Machine Shop, Lowell, is now employing about 700 hands on full time. The general business of this shop has improved of late, a number of good orders have been taken on and the prospects are that with the revival of trade in the fall they will be obliged to make further additions to their force. During the past two years they have made extensive improvements in their manufacturing capacity and can now, if pressed, turn out more work than ever before. Wm. A. Burke, who has so long filled the position of treasurer, has resigned his position on account of ill-health, and has been succeeded by General Robert H. Stevenson, a gentleman in every way qualified for so important a position.

THE superior qualities of the Rackrock blasting powder have been so fully and frequently demonstrated that it hardly needs any further endorsement. Nevertheless we take pleasure in publishing the following letter, which explains itself:

VOSBURG TUNNEL.

LENTZ & Co.,

VOSBURG, PA., August 9, 1884.

Rendrock Powder Company,

23 Park Place, New York City:

GENTLEMEN—Having tried all the high explosive powders that are made, we found that the Rackrock powder gave the best satisfaction, both for execution in blasting in our tunnel headings, and was less injurious to the men's health. We cheerfully recommend the Rackrock powder to all parties having tunnels to build. Yours truly,

LENTZ & Co.

THE SEPTEMBER CENTURY.—In its contents the September Century aims to rival the August "Midsummer Holiday Number" in entertaining summer reading, as well as in articles of unusual importance. Pictorially, it is also of popular character.

"From Coventry to Chester on Wheels," the opening illustrated paper, recounts the experiences of Mr. Joseph Pennell, the artist, during a trip on a tricycle in England.

A stirring incident of life in foreign lands is also given in Horace D. Warner's description of "A Tropical Hurricane" in Costa Rica. Of biographical interest is the paper (with full-page portrait) on the French lexicographer, "Emile Littré," by the author of the papers on "Gambetta" and "The Forty Immortals," which were published in The Century.

Professor S. P. Langley, the well-known astronomer of the Alleghany Observatory, begins in this number a series of popular illustrated papers on "The New Astronomy." In this first article, the character and significance of "The Spots on the Sun" are explained with the aid of numerous pictures.

Among the other articles are "The Foreign Elements in our Population," by Joseph Edgar Chamberlain; W. I. Stillman's second paper, descriptive of his yacht journey, "On the Track of Ulysses" and two short stories; "Fancha—A Story of Monterey," by Thomas

A. Janvier; and a humorous dialect story of Southern life, called "The Brief Embarrassment of Mr. Iverson Blount," by Richard Malcolm Johnston. "Topics of Time" and "Open Letters" possess their usual interesting features.

Important to Southerners.

Persons arriving in New York via Cortlandt Street Ferry, by taking the 6th Avenue Elevated Train, corner Church and Cortlandt streets, can reach the Grand Union Hotel in 42d street, opposite Grand Central Depot, in twenty minutes, and save \$3 carriage hire. If en route to Saratoga or other summer resorts via Grand Central Depot, all baggage will be transferred from hotel to this depot free. 600 elegantly furnished rooms \$1 and upwards per day. Restaurant the best and cheapest in the city. Families can live better for less money at this hotel than at any other first-class hotel in the city. †

If you are not already a subscriber to the BALTIMORE MANUFACTURERS' RECORD, send us \$3 and you will receive it regularly for one year or six months for \$1.50.

CONSTRUCTION DEPARTMENT.

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

ALABAMA.

The Mobile Gas Light and Coke Co., Mobile, Ala., will introduce water gas process into their works.

C. V. Nash, of Minneapolis, will move to Montgomery, Ala., and put in machinery for working yellow ochre bed as previously reported.

M. M. Teague has the contract for a jail to be built at Elba, Ala.

ARKANSAS.

Kirk Bros., Lonoke, Ark., have commenced work on their oil mill and ginnery previously reported.

The McKeever Beef Canning Co., of Chicago, Ill., will spend \$250,000 in building a beef canning house near Clarendon, Ark.

FLORIDA.

Canova, Palatka, Fla., has purchased the machinery for his ice factory, previously reported.

Messrs. Scoville & Culpepper, of Suwanee Springs, Florida, will build another hotel.

Eustis, Florida, is to have an ice factory.

Messrs. Carter & Cross, Tavares, Florida, who are building a saw mill, will also manufacture woodenware.

John Quailley, of Tallahassee, Fla., will start a tobacco factory.

GEORGIA.

The Rome Street Railway Co., Rome, Ga., will soon commence building their road.

The Waycross Lumber Co., Waycross, Ga., are building about 30 miles of railroad for opening up new timber regions.

Aaron Lard, Nance's, Ga., is putting up steam ginnery.

Clay Taylor, near Columbus, Ga., is erecting a ginnery.

J. C. Stallings, near Newnan, Ga., is putting up a saw mill.

B. R. Armstrong will build the Telfair Hospital at Savannah, Ga., to cost \$30,000.

The Porter Manufacturing Co., on Soque river near Greensboro, Ga., will soon increase their capacity by adding new machinery.

Powers & Dill, will build a hotel at Bartow, Ga., for Davis & Clay.

KENTUCKY.

W. M. Fitzwater and others, Olive Hill, Ky., have formed a copartnership to manufacture churns.

Reported that John Seiler, Covington, Ky., will build a brewery.

Andrew Brown, Buffalo, N. Y., will, it is said, build a saw mill and keg factory at Olive Hill, Ky.

MARYLAND.

The Pneumatic Gun Carriage Co., capital \$250,000, has been incorporated in Baltimore by F. H. Paine, Chas. E. Creecy, Chas. C. Lancaster and others.

Gill & McMahon, Baltimore, have received the contract for work on the Baltimore post office building for \$108,235.

The Merchantile Trust Co., Baltimore, have paid \$76,000 for a lot on which to erect a large safe deposit building.

MISSISSIPPI.

The Rosalie Cotton Mills, Natchez, Miss., have closed for repairs.

The Planing Mills of the DeSmet Yards, Moss Point, Miss., have been leased to Mr. Buddig, of New Orleans.

Col. Richardson will build a Narrow Gauge road from Carolina Landing to Lake Washington, Miss.; work will be commenced very soon.

NORTH CAROLINA.

P. H. Abenathy of Mitchell, N. C., has bought an interest in a mica mine which will be developed.

Leak, Wall & McRae, Rockingham, N. C., are building a cotton gin press and grist mill.

TEXAS.

The Western Plaster of Paris Co. has been chartered at Sweetwater, Texas.

The foundry of Garrity & Co., which was to have been located at Temple, Texas, will locate at Belton, Texas.

W. C. Conner has contracted with the Brenham Water Co., Brenham, Texas, to build water works at that town.

The contract for the court house at Brownwood, Texas, has been let to Mr. Slater, of Fort Worth, for \$46,408.

The Galveston Sabine & St. Louis Railway, narrow gauge, will build a road from Longview to Carthage, Texas.

Proposals are invited for the construction of a jail at Abilene, Texas, to cost from \$8,000 to \$18,000. Mr. David J. Reed will receive them.

The City Council of Dallas, Texas, has issued bonds for the erection of water-works to cost \$95,000.

The Howard Oil Mills at Palestine, Texas, are adding new machinery and making repairs.

Mr. D. M. Butler, of Palestine, Texas, will probably build a flour mill.

A new company is talked of, to establish a smelter at El Paso, Texas.

The leading citizens of Silville, Texas, are talking of establishing water-works.

TENNESSEE.

The Southern Machinery Co., Shelbyville, Tenn., have purchased ground for the erection of new machine shops and foundry.

An axe handle factory will probably be started in Dickson, Tenn.

VIRGINIA.

A Presbyterian Church will be built at Roanoke, Va.

The Aiken Organ Factory will be rebuilt at Winchester, Va. Previously reported as burned.

Flour mill of J. W. Vinyard, at Gish's, Roanoke Co., Va.

BURNED.

The Sibley Cotton Mill, Augusta, Ga., was damaged by fire Aug. 22; loss about \$30,000.

Mill and ginnery of Lee Teague, Sr., Columbia, Henry Co., Ala.

Brown Woolen Mills, Greenville, Tenn.; loss \$20,000.

Tobacco factory of R. Pearson & Co., Danville, Va.

The gin house of A. C. Swings, Dials, Laurens Co., N. C.

T. G. Bush's gin house, near Oxanna, Ala. It contained a large amount of machinery belonging to Messrs. Bush & W. T. Higgins.

Saw and gin mill of Wilson Trott, at Salisbury, N. C.

The Columbia Lime Works, of Cammack & Decker at Washington, D. C.

Saw mill of R. F. Griffin, near Cedartown, Ga.

MANUFACTURING.

BALTIMORE.

The firm of Hirshberg, Hollander & Co., wholesale dealers in paints, oils, &c., No. 240 West Pratt street, was established in 1845, and their business has grown from a small beginning to its present enormous proportions. They are manufacturers' agents and wholesale dealers in French and American window-glass, cut, ground, enameled, and colored glass, looking glass, plates, paints, oils, varnishes, &c. They are manufacturers of neats-foot, harness, and machinery oils. They occupy three large warehouses on West Pratt street, where they have a full and varied assortment of goods in their line.

Mr. Philip R. Vogel, Jr., dealer in brass, copper, &c., No. 79 German street, reports his trade as picking up, especially in the city. He has a number of orders on hand, and from the number of enquiries he expects to do a heavy fall trade.

The firm of Poole & Hunt, of Woodberry, Baltimore county, has secured the contract to furnish all the cable driving machinery for the Hoboken City Railway. This cable plant will be the heaviest and most extensive in the United States. The same firm has just completed the machinery for cable railway in New York city, and also for the Kansas City Cable Railway.

Messrs. James Murray & Son, machinists, No. 40 York street, have a liberal amount of repair work on hand, and have completed orders for some new work recently mentioned in the MANUFACTURERS' RECORD.

Messrs. James Clark & Co., south side of basin, report their business booming. They have done a large amount of repairs on boats of all kinds, and have sufficient on hand to keep their force going for some time.

Mr. Wm. L. Pettit, boiler maker, No. 40 York street, is now building a 100 horse power Scotch boiler, part iron, and part steel, for the Seaboard & Roanoke R. R., at Portsmouth, Va., and has completed the large contracts for work lately mentioned in the MANUFACTURERS' RECORD.

Mr. R. Swormstedt, general agent Ewart detachable chain belting, reports his business in a flourishing condition, having orders on his books sufficient to keep him going for some time. He receives orders from all parts of the South for the belting, and all say it gives entire satisfaction.

Messrs. H. C. Larrabee & Co., machinists, have a large amount of large castings to turn out for firms in the city, and have a number of repair jobs on hand. They report the prospects for fall trade as very encouraging.

MR. LEE WHITESCARVER will donate ten acres of land near Palestine, Texas, to any one who will establish a canning or other factory thereon.

THE MANUFACTURERS' RECORD, with its last week's issue, this enterprising and useful paper entered upon its sixth volume, new series. We congratulate it on the success that has attended its efforts. It has been unceasing in its efforts to attract attention to the splendid facilities afforded by the South for the investment of capital and as a place to settle. Its statistics of the material growth and prosperity of the Southern States, and their remarkable development, have attention, and have been of untold benefit.—*Asheville, N. C., Citizen.*

Some New Tools.

The cuts on next page represent several new tools made by Gould & Eberhardt, of Newark, N. J. They are made from new patterns, the parts being made heavy and yet not clumsy, the metal being distributed to insure solidity and durability. They are simple in design and construction, and the parts are arranged for convenience of the workmen.

All wearing surfaces are scraped to a bearing, no emery being used; all gears, racks, &c., are cut from the solid, and nuts, bolts, screws, wrenches, &c., are case-hardened. The spindles and shafts of lathes, planers, gear cutters, and all screws are made of steel. All spindles and shafts are large in diameter and run in extra long bearings of the best Babbit, bronze and cast iron metals. The cones of all the lathes are turned inside as well as outside, to balance them and to secure steadiness at high rates of speed. These tools show results of long study as to requirements of the trade. The automatic gear cutter comes from the same source, of which over 20 have been built in about 18 months and given entire satisfaction.

Figure 1 shows a 15-inch patent shaper, with 20 inch stroke. There are five different sizes, viz: 8 inch with 10 inch stroke, 10 inch with 15 inch stroke, 15 inch with 20 inch stroke, 20 inch with 25 inch stroke, and 25 inch with 30 inch stroke. All these shapers have recently been improved, with improved vises, deeper crossheads, more bearing in several parts, &c. The bases are of a columnar form, spreading out wide at the bottom, giving large bearing surface upon the floor. They have a swivel vise, steel faced jaws projecting outside to hold long or short work for planing it on ends, such as punches, rods, &c. Work can be fastened as quick as in the common vise, at any angle; it will plane any bevel. The tool bar is heavy, and is worked by a patent adjustable crank motion and slotted lever; it gives a slow motion for planing, and a quick return. It can be instantly set to give any required stroke, while in motion or at rest. The stroke on each machine is graduated, and a pointer indicates the length it planes. Adjustable centre on vise raises and lowers automatic brake to stop quick; bearings are large and long, and machines will take a heavy cut. The large gears have extra large bearings, to wear well; vise is quickly replaced with face plate by one bolt; cross slide stops automatically at each end, so the machine can be kept at work with little attention; it is self-feeding; across or circular, dies, racks, keyseats, cranks, and many parts of all machinery can be planed quicker than on an ordinary planer, with saving on files, time, &c. These shapers are acknowledged by practical mechanics to be the best tools now made for work within the range of a shaper on general work. There are over 800 in use; some firms have from 1 to 11 machines in use; also largely in use in railroad shops.

Countershaft, face plate and wrenches go with each machine. All have four speed cones. 8 and 10 inch countershafts should make 130 revolutions; all others 160. Diameter and face of each counter pulley is 8 inches,—10x2; 10 inches,—12x3; 15 inches,—12x3; 20 inches,—14x3; 25 inches,—14x3. Weight, about, of 8 inch, 900 lbs.; 10 inch,

LOCKWOOD, GREENE & CO. MILL ENGINEERS

Office, 65 Westminster St., Providence, R. I.

Carefully prepared plans, specifications and estimates furnished for the construction, equipment and organization of new mills and the revision and improvement of old.

1,400 lbs.; 15 inch, 2,000 lbs.; 20 inch, 2,500 lbs.; 25 inch, 3,600 lbs.

Extra attachments, such as index centres, circular mandrill spiral cutting attachment cuts any spiral, a new and valuable feature. Rack cutting attachment; special circular motion for planing heavy convex and concave surfaces, (something new;) these attachments are very convenient where a variety of work is to be done.

Figure 2 shows a 24 inch planer. These planers are made of different sizes, ranging from 18 to 42 inch and of any desired length. They are all made of the same design, with deep and well ribbed beds to insure solidity. The table is deep and wide and bolt slots are planed out; pin holes are bored reamed. The ways are protected from chips and dirt by a bead on each side of the Vs, thus avoiding cutting of the ways. The shafting device is so arranged that when the dogs are once set the table can be run back to examine the work, &c., without loosening up the dogs. All run with two belts. The steel shafts are of large diameter and run in extra long bearings. The quick return speed is from 80 to 120 feet per minute and they are built in diameter and length of bearings to wear at these speeds, which is a great saving.

Figure 3 shows a 16 inch quick stopping hand lathe. (Patent allowed.) This tool is well adapted to pattern makers, brass finishers, machinists, tool and die makers. It has several new features which are original with the makers. A quick stop operated by friction, shown in head, enables the operator by slightly pressing on the lever to stop the lathe instantly. It can be started and stopped about 40 times per minute, thus saving at the end of one or two years a great deal over the ordinary lathe. Another new point is the tail stock, being concave on the front side, permitting the compound slide rest to turn small taper work, such as plugs, &c. Also the hand rest is clamped fast, thus avoiding the bruising up of the shank. The live spindle is made of steel, running in the best deoxidized bronze and has a $\frac{3}{8}$ inch hole through it. Front bearings are $1\frac{3}{4} \times 5$ inches long. The cone has four changes of speed for $2\frac{1}{2}$ inch belt. The tail stock and hand rest are fastened by an eccentric lever. A long and short hand rest, one face plate and wrench go with each lathe. They are also made with back gear at an extra cost; also compound slide rest for brass workers and lever attachment for light and quick drilling. Independent and universal chucks furnished at makers' prices. Beds can be made any length. Wooden cones in place of iron if desired. Tight and loose pulleys are 8×3 and should make 300 revolutions per minute.

For further information address the builders, Gould & Eberhardt, Newark, N. J., or their agents, Niles Tool Works, Chicago, and Hill, Clark & Co., St. Louis.

Gold Mining in Georgia.

A correspondent of the New York Evening Post, in a description of a visit to the gold mining districts of Georgia, says:

Late in the afternoon we entered a valley in which we crossed seven creeks, or one creek seven times, we could not determine which, in going a mile. Then, climbing out of it, up a long hill, we emerged upon the open plateau on which Dahlonega is built. It is a pretty town, open, high, breezy, built around a court-house square, which was filled as we turned into it with a picturesque mob of carriages, equestrians, negroes, steer-drawn carts, and canvas-covered Georgia wagons. The old court-house and sun-dry long barrack-like buildings speak of the old regime, while several modern cottages and boarding-houses in juxtaposition indicate the new. For Dahlonega is now more a summer resort than a mining town, the mines which brought her into existence having been largely abandoned for those of other localities. Nevertheless it remains the centre of the

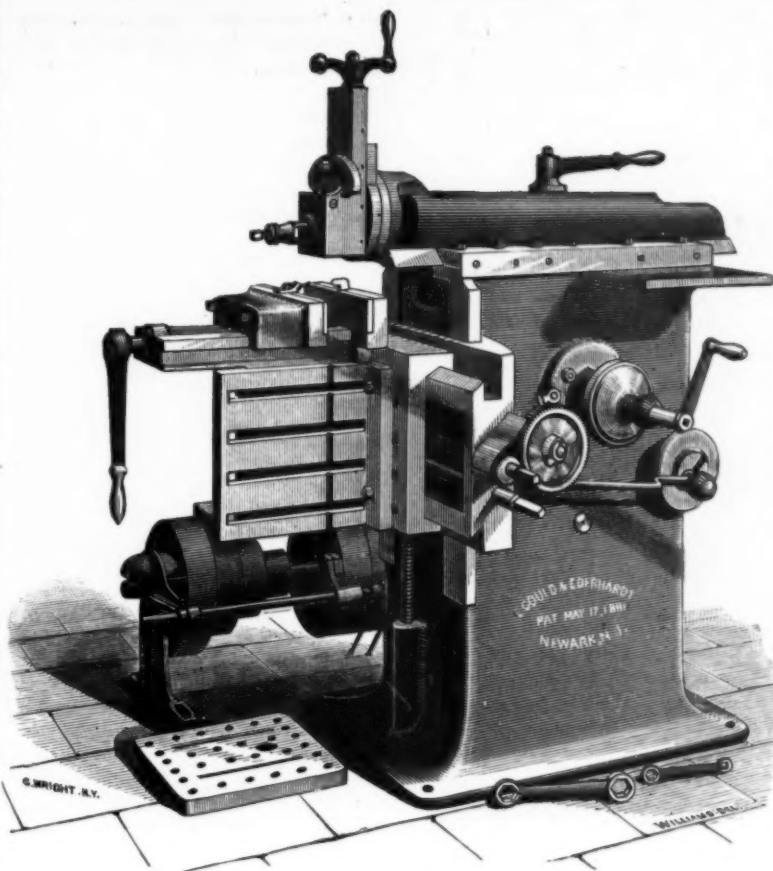


FIGURE 1.

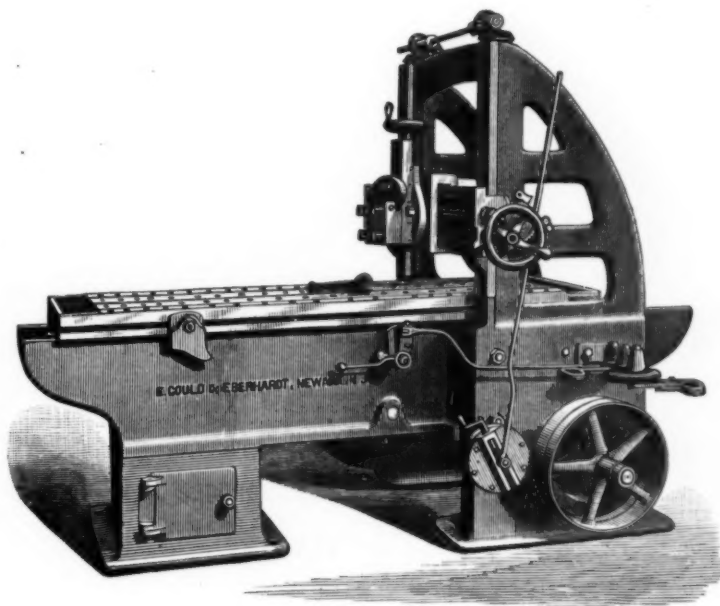


FIGURE 2.

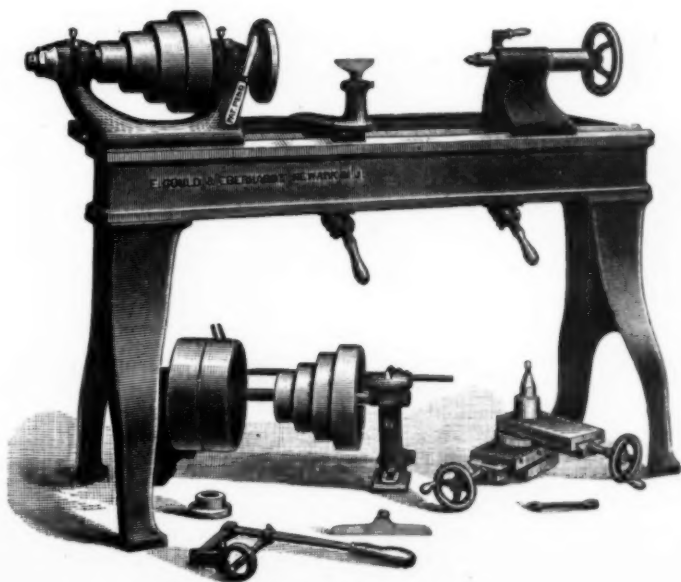


FIGURE 3.

Georgia gold belt and is the place where the history of the discovery and development of the latter is to be obtained. The red hills for miles around it are honey-combed with holes of greater or less depth dug by prospectors, and in the immediate vicinity of the town are several extensive mines formerly quite productive. This gold belt is identical with that of South and North Carolina and has been traced for 200 miles along the southern base of the Blue Ridge. It is proudly stated by miners here that the first gold discovered in the United States was taken from this belt in 1797, the finder being a lad named Conrad Reed, and the locality Cabarrus County, North Carolina. The "find" is said to have been as large as a smoothing iron and was sold to a silver smith, tradition says, for three dollars and a half. There are misty legends afloat, too, of a piece weighing twenty-eight pounds being subsequently discovered. Prospectors followed westward the vein thus stumbled upon, and as early as 1820 began encroaching on the Cherokee Reservation, which then covered all these mountain peaks and valleys. The rush was like that to California in 1849, though less in degree. Mountaineers by hundreds hurried into the territory, set up their log camps on the streams, and began panning the gravel deposits. Naturally the Cherokees resented this intrusion, and almost daily collisions occurred between them and the whites. Georgia sent a strong police force into the territory to preserve order, without effect, and a little later the United States troops were called in with no better success. But in 1830 Georgia cut the Gordian knot by adopting the Cherokees as wards, lands and all, and erected their territory into a county called Cherokee County. She then divided the mineral lands into lots of forty acres each, and put them into a lottery, as was the fashion in those days. The lucky number, old miners say, was 1052, a lot on the Yahoola River already celebrated, it having been long a custom for men to steal over there at night, bring home a meal-sack of earth from the vein, and wash out the next day from twenty to forty dollars' worth of gold. One sees all about the town in deep mine holes dug by prospectors, and long lines of ditches and pipes, abundant evidence of the presence of the gold-seekers.

Quite different methods for extracting the gold from those later in use in California and Nevada were employed here. The first comers used very primitive apparatus, washing the gold from the gravel deposits through splint baskets into what was called a "gum-rocker," a log split in two and hollowed out into a trough with transverse cleats nailed at intervals. By violently rocking this cradle the water, silt, and gold were forced through it, the gold by its greater weight sinking to the bottom and being retained by the cleats without the aid of quicksilver. But when the gravel deposits were exhausted other methods were necessary to extract the gold, which was pretty evenly distributed, but in small quantities, through the slates, clays, and decomposed sandstones of the hills. A cheap method was vitally necessary too, for there was so little gold in the mass that the expensive processes of quartz mining were not to be thought of. Organized capital had by this time come in, and its engineers at once hit upon a plan for making these lightly charged ores productive. Water, to be had everywhere free as air, was to be the motor. Going up seven or eight miles above the town, near the head waters of the Yahoola, they built a dam at a point where the stream had cut a narrow passage through the hills. Then they led its waters twenty miles down to the mines by a ditch six feet deep and six wide, that pierced the hills by tunnels, wound along their sides, and crossed the valleys either on trestle-work or in huge siphon-like pipes. In carrying this conduit across the Yahoola valley an engineering feat was performed worthy of record. It was found that a trestle 250 feet high and a half mile long would be required.

The total output of gold from the Georgia mines it would be very difficult to compute. The branch mint established at Dahloneg by Act of Congress of March 3, 1835, coined from 1838, when it began operations, to February 28, 1861, when it was broken up by the war, 1,381,789 pieces, having an estimated value of \$6,121,919. This amount, it may be safely concluded, was produced from the mines; how much more there is no means of knowing. The mint was not reorganized at the close of the war. Its building was transferred in July, 1871, to the corporation of the North Georgia Agricultural College, and is still occupied by that institution.

THE MARKETS.

Prices are about same as last reported:

Philadelphia Iron Market.

The plate and structural mills hereabouts have a fair supply of work on hand, and there are a number of large orders now in negotiation, but no heavy business has been booked for several days past. A moderate movement of small lots kept up, however, and manufacturers are in good spirits, and inclined to hold a little more firmly to asking prices for this small business, though fair concessions would be made to secure large orders. The Bar mills, with one or two exceptions, are less fortunate, receiving only the most trifling amount of business, and at prices far from remunerative. Refined iron ranges from 1.75 to 1.90; the best makes command 1.90 to 1.95 in small lots. Owing to the light business, mill owners are not buying very much crude iron. Fair qualities of forge have sold in this market at \$16.50 to \$17 delivered, within a few days, and there are offers for standard brands at these prices. Very little iron sells at more than \$17.50. Foundry is almost without movement; Inferior No. 1 has sold at \$18, and No. 2 at \$17.50, but the usual prices for a good make are \$19.50 for No. 1, and \$18.50 for No. 2; some special makes are held a good deal higher, and no concessions can be obtained. Foreign irons are dull at \$19 for ordinary Bessemer, and \$28 for 20 per cent. Spiegeleisen. Steel rails have dropped to \$27 to \$27.50 in small lots. A good many large transactions have been closed, but terms are invariably private. It is quite possible that \$26 has been taken. Rumors of \$25 being taken are, however, without foundation. There are negotiations now on hand for large lots at very low figures for winter delivery. Old material sells in an occasional large lot. 600 tons of Bull Heads from South America have been bought at a little less than \$20, f. o. b. here. Old rails are offered in large lots at \$18 to arrive; there are offers for 1,000 ton lots of best quality at \$18, but it is doubtful that their being accepted. Nails are very dull and weak, and large lots will not bring over \$2.15, and less may have been taken. Small lots are quoted at \$2.20 to \$2.25.

Cincinnati Iron Market Report.

Three furnaces making "Scotch" iron in Central Ohio have recently blown out for a

	FOUNDRY.	Four Months,
Hanging Rock Charcoal, No. 1.....	1	\$21 00 @ \$2 50
" " " " " "	2	30 00 @ 21 50
Strong Neutral Coke, " " " "	1	17 50 @ 18 00
" " " " " "	2	16 75 @ 17 25
American Scotch, " " " "	1	18 00 @ 18 50
	GREY FORGE.	
Neutral Coke.....	15	75 @ 16 00
Cold Short.....	15	00 @ 15 50
	CAR WHEEL AND MALLEABLE.	
Hanging Rock, strictly cold blast.....	26	00 @ 26 50
" " " " " warm " " " "	32	50 @ 23 50
Lake Superior Charcoal, all grades.....	23	00 @ 24 00
South. Car Wheel, strictly cold blast.....	26	00 @ 26 50
Crushers and Virginia Warm Blast.....	21	25 @ 21 75

Chattanooga Iron Market.

No. 1 Foundry.....	\$17 00	@18 00
No. 2 Foundry.....	16 00	@16 50
Gray Forge.....	14 00	@15 00
Car-Wheel Iron.....	22 00	@24 00
Ones, Red & Brown.....	1 50	@2 00
Furthest Cork.....	2 00	@2 25
Nails, car-load lots, 30 days.....	—	@ 1 70
Bar Iron, per lb.....	—	nominal.
Old Rails.....	—	16 00
Old Wheels.....	14 00	@—
Wrought Scrap, No. 1.....	11 00	@—
“ “ No. 2.....	10 00	@—
Cotton Tie Clippings.....	—	10 00
Cast Scrap.....	—	1 90
Rail-Road Splices.....	2 00	@—
Light Rails.....	6	@—
Barbed wire—four point galvanized.....	6	@—
Barb wire—Cambria link.....	6	@—

Louisville Iron Market.

The market during the last week has shown more activity than for some time past, and several orders for round lots have been received, though prices remain about as they were :

St. Louis Iron Market.

Iron, par.

Carriage and Wagon Material.

PAINTS OILS &c

PAINTS, OILS, &c.

PAINTS.	
Black Lamp, coach painters.....	7 1/2 20c
Black Lamp, ordinary.....	9 1/2 6c
Black Ivory Drop, fair.....	12 1/2 15c
Black Ivory Drop, best.....	23c
Black Paint, in oil.....	kegs, 6c; assorted cans, 9c
Blue Prussian, fair to best.....	40c 55c
Blue Prussian, fair to best, in oil.....	45c 55c
Blue Chinese, dry.....	70c
Blue Ultramarine.....	155c 6c
Brown Spanish.....	15c
Brown, Van Dycke.....	5c 15c
Green, chrome.....	8c 15c
Green, chrome, in oil.....	9c 12 1/2 15c
Green, Paris.....	good, 20c; best, 25c
Green, Paris, in oil.....	good, 20c; best, 25c
Iron Paint, bright red.....	25c
Iron Paint, brown.....	15c
Iron Paint, ground in oil, bright red.....	25c
Iron Paint, ground in oil, bright red.....	25c
Iron Paint, ground in oil, red.....	5c
Iron Paint, ground in oil, brown.....	45c

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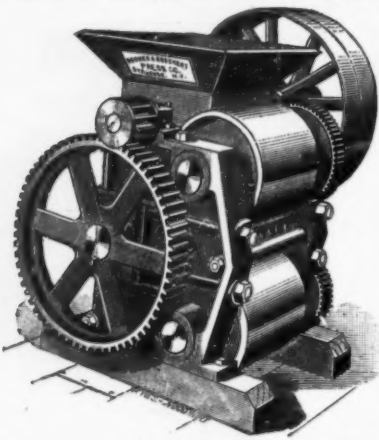
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For the purpose of making the MANUFACTURERS' RECORD a still more valuable medium of communication between its readers North and South, we will publish, FREE OF CHARGE, short advertisements, not exceeding 40 words, from those in the South who have mills, factories, manufacturing sites or water-power for sale, capital wanted for industrial enterprises, &c., &c.; while readers in other sections who desire to engage in manufactures at the South are also invited to use these columns, without cost, either in seeking information regarding the advantages and special claims of different localities, or for asking about good openings for men and money. This department is also free for Southern manufacturers who wish to advertise for mill managers, superintendents, engineers, &c.

In corresponding with any of these advertisers please mention the Baltimore Manufacturers' Record.

A Northern manufacturer desires to establish machine shops at some point in the South for building engines, saw and planing mills, general machinery of all kinds, to do repair work, &c. Information is desired as to what towns need an industry of this kind, and their natural advantages for a successful business. Address Williams, care MANUFACTURERS' RECORD, Baltimore.

FOR SALE—A cotton mill situated on the line of the Illinois Central Railroad, near the city of Canton, Miss., in a splendid cotton region, good water supply, cheap fuel, labor abundant. The factory would be equally adapted to ginning on a large scale, by improved methods, and cotton-seed-oil mill combined. The property consists of 28½ acres land, lying along the railroad; factory building 100 yards from the railroad, in the centre of the tract, substantially built brick, 200x300 feet; contains one English engine 200 horse, two English lappers, shafting and pulleys. There is a double dwelling-house on the property. Bigsby & Edmonds, Baltimore, Md.

A PRACTICAL cotton manufacturer of New England, with an experience of 25 years as lessee and manager, wishes to negotiate for management of a Southern cotton mill. Will buy some of the stock, if satisfactory. Can furnish letters from some of the best men in the business. Address E. B., care MANUFACTURERS' RECORD.

COTTON MACHINERY, now running in first-class order, for sale on easy terms, or might take part payment in stock. A rare chance for a new mill, or others wishing to increase their machinery, to secure a bargain. Particulars furnished by A. B. Pitkin, Manufacturers' Agency, Providence, R. I.

COTTON MILL FOR SALE.—A North Carolina cotton mill, with or without machinery. Well adapted and located for cotton or woolen manufacturing, hosiery, underclothing, rice milling, &c. A great bargain is offered. Satisfactory reasons for selling. Address Bigsby & Edmonds, Baltimore.

WANTED.—A party with \$1,000 cash, to take an interest in a paying manufacturing business already established in Norfolk, Va. All communications strictly confidential; anonymous ones not noticed. Address, "Manufacturer," care BALTIMORE MANUFACTURERS' RECORD.

FOR SALE.—A foundry and machine shop now doing a fair business, which can be largely increased by additional capital. Has a lot of good patrons for engines and mills, boiler tools, &c., reason for selling, bad health of the owner. Address B & P, box 33, Staunton, Va.

WANTED.—A practical miner to open a mountain of Asbestos. Must furnish \$1,000 capital. Mine is 7 miles from depot on W. N. C. R. R. Address Robert Rogers, Cullowee, N. C.

MICA.—Party with some capital wanted to mine Mica deposits in Virginia. Address Pick, care of MANUFACTURERS' RECORD.

GOOD WATER-POWER FOR SALE.—With a tract of pine land and farm land, extra good water-power, near James River, Va. Terms easy. Enquire of or address George Martin, Claremont, Va.

WANTED.—A situation as manager of a cotton mill by a manufacturer of large experience. Address S. L., care of MANUFACTURERS' RECORD.

A MECHANICAL MAN, with a small capital, can find business connection with mills in a very healthy locality in North Carolina. Also a man to engage in the leasing and selling lands and mines. Also a Printer with a small capital, a good chance. Address W, MANUFACTURERS' RECORD.

MINING ENGINEER desires engagement as manager or superintendent. Makes essays. Late superintendent large copper mine in North Carolina. Best of references. Address Clarence M. Buel, M. E., 275 18th street, Brooklyn, N. Y.

YARN FACTORY FOR SALE.—Stocked with latest improved machinery, and having an established trade in rope, twines, &c. A magnificent opportunity for investment. Bigsby & Edmonds, Baltimore, Md.

COTTON MILL FOR SALE.—Built in 1879, in the centre of cotton region; 3,000 spindles; machinery nearly new and first class. Whole can be bought at great sacrifice, or mill will be put into stock company. Full particulars upon application to Bigsby & Edmonds, Exchange Place & Commerce street, Baltimore.

WOOLEN MILL AND WATER POWER FOR SALE.—Well located in West Virginia, buildings and machinery new, latter of most improved makes. One of the finest water powers in the State. Address G. W. M., care MANUFACTURERS' RECORD, Baltimore, Md.

CAPITAL WANTED.—For manufacturing an article on which patent is now pending. A large and profitable business can be done. Address J. C. T., care MANUFACTURERS' RECORD.

WANTED TO BUY.—A second-hand loom, for making bagging for cotton baling. Address E. O. C., care MANUFACTURERS' RECORD.

Young man practically experienced in managing foundry, machine and wood shops, who has made handling help and economical production a study, is open to engagement as superintendent or as working partner in business requiring little capital. References given and required. Address E. L. Ross, Indian Orchard, Springfield, Mass.

WANTED.—A position as chemist by a graduate of the School of Mines Columbia College. Will engage in any sort of chemical or metallurgical work. Address S. M. C. Call, 220 South 5th St., Reading, Pa.

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The forty-first annual session closed on the 18th of June. During the session 136 boarders and 5 day-pupils were in attendance—the accommodations being fully occupied from the beginning. There were seven FULL GRADUATES—4 diplomas each; nine graduates in special courses—4 diplomas each; and many other graduates, in single departments—1 diploma each. Six male Professors and nine ladies gave their time and energies wholly to instruction. The departments of Music and Art were largely attended, and attained not only satisfactory but eminent success.

This Institute is conducted in the interests of the higher education of girls generally—not of some particular sect or party. It maintains high standards in Literature and Science, Music and Art, as well as in manners, morals and religion. Its facilities in Faculty and appliances are great, and it proposes constant progress—each succeeding session must be an improvement and an advance on all the past.

The 42nd session will open on the 17th of SEPTEMBER next. Circulars, giving full information as to accommodations, courses of instruction, terms, &c., will be forwarded on application.

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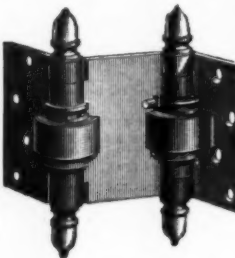
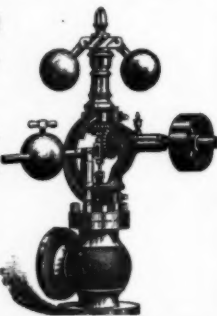
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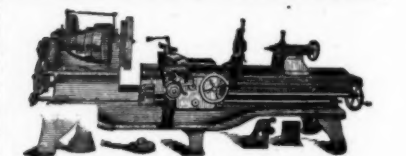
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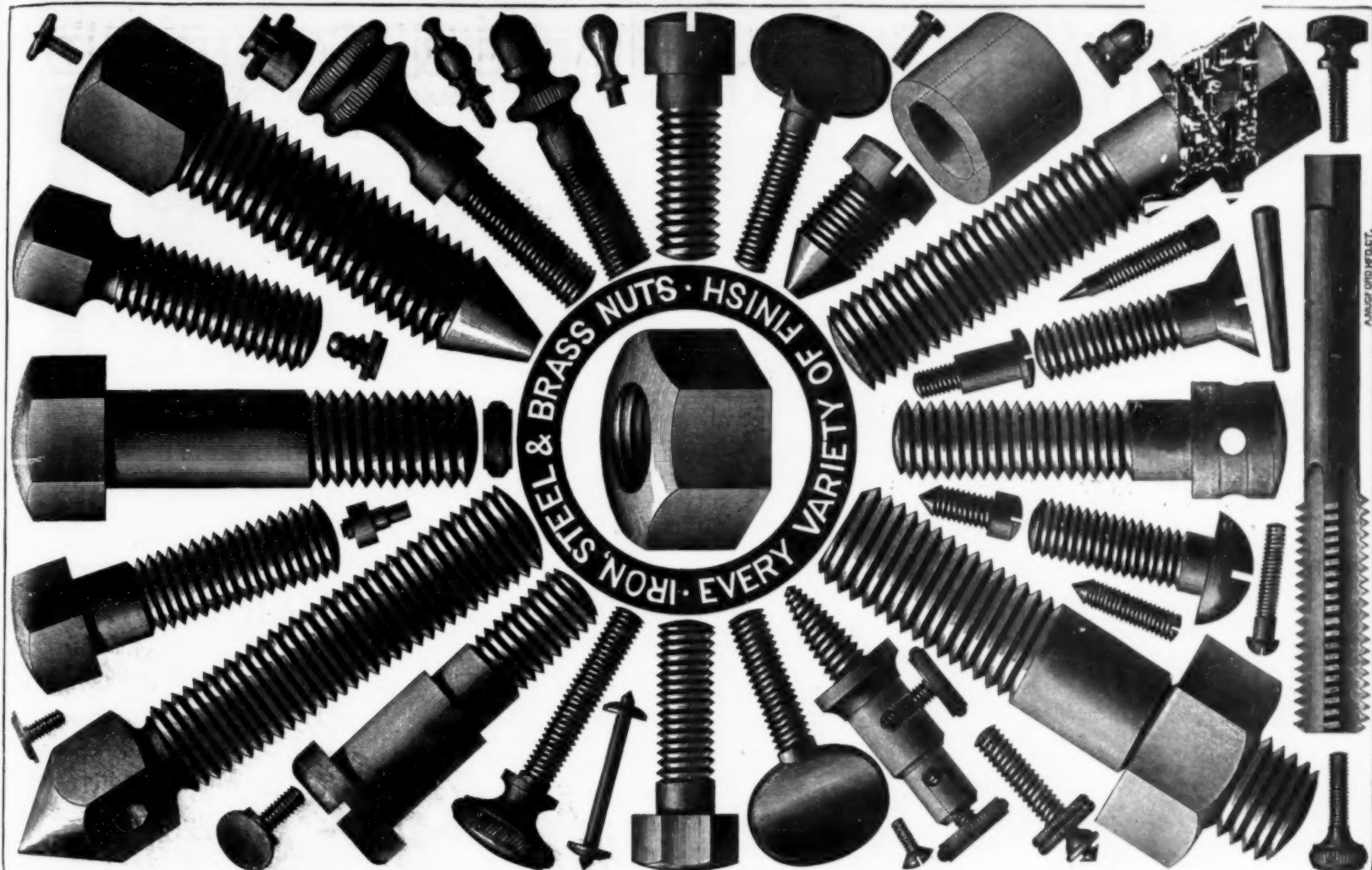
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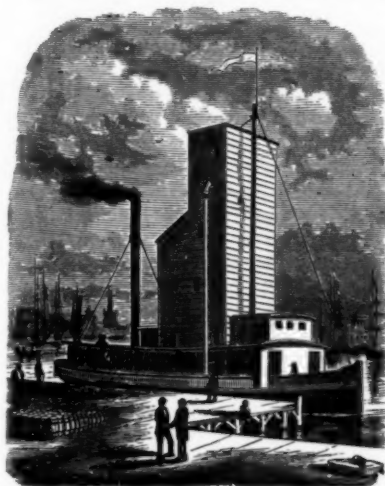
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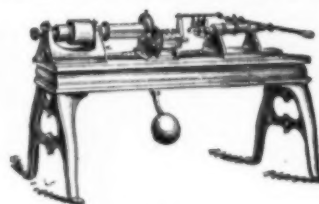
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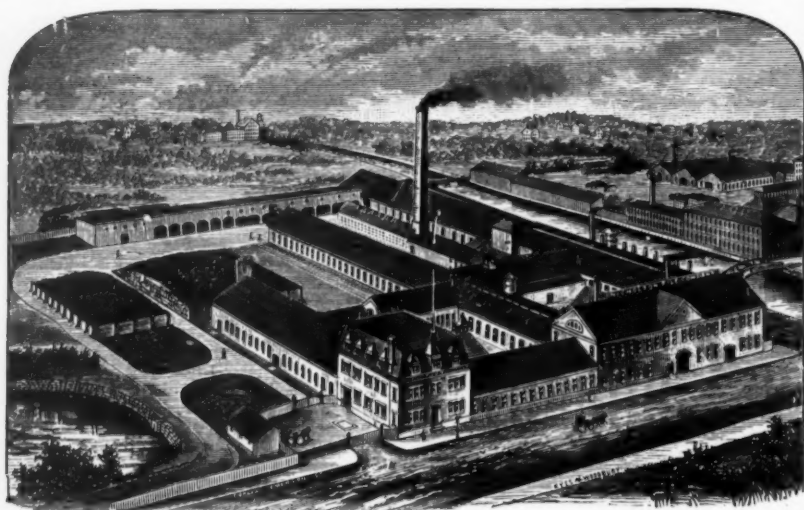
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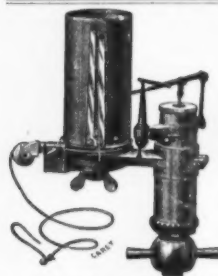
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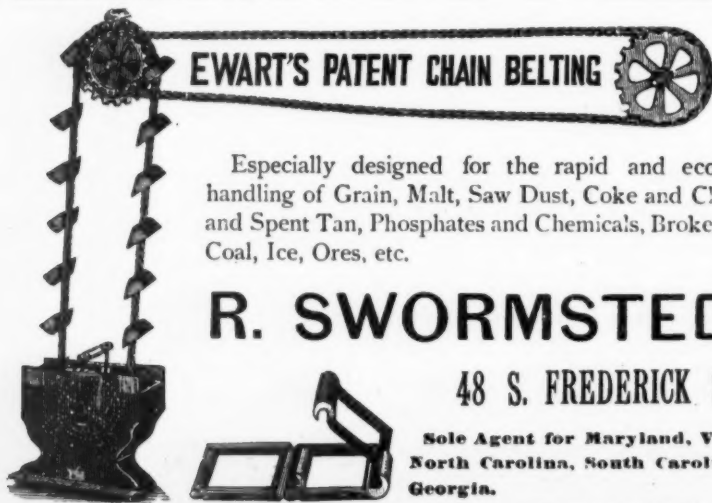
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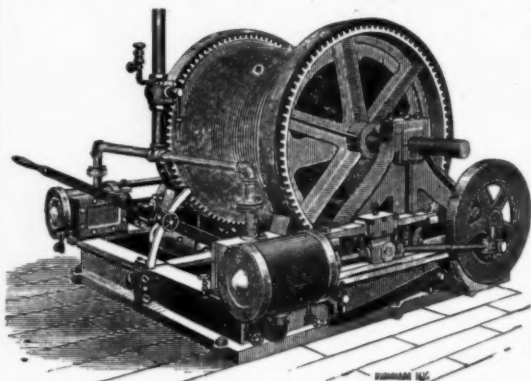
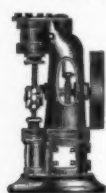
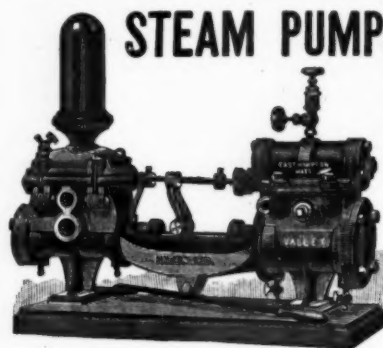
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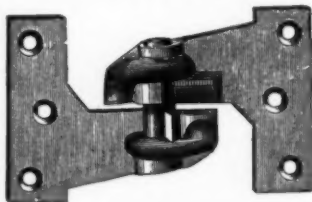
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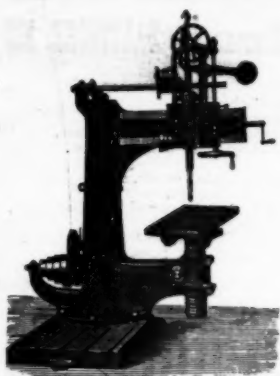
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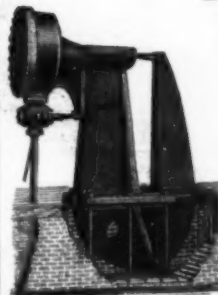
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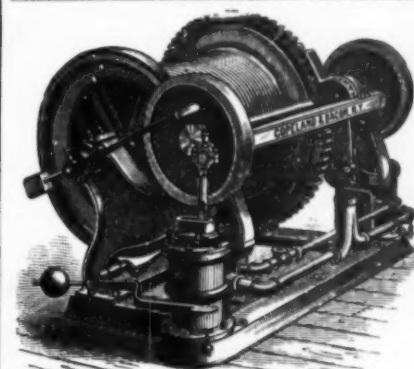
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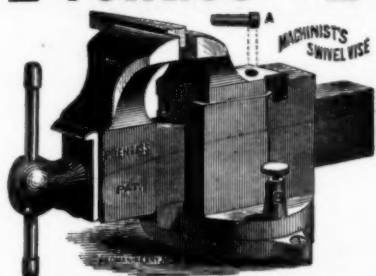
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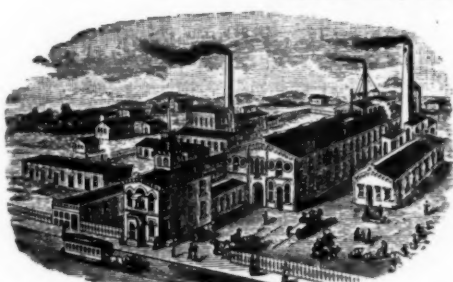
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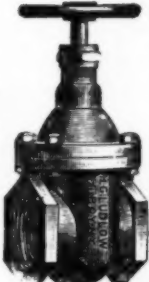
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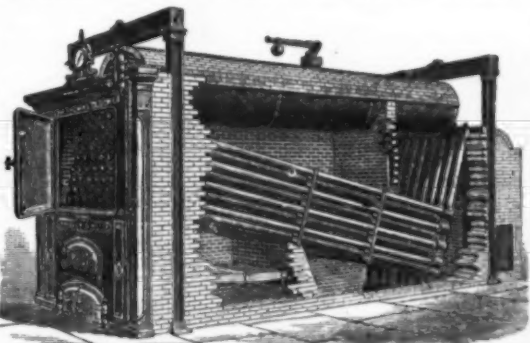
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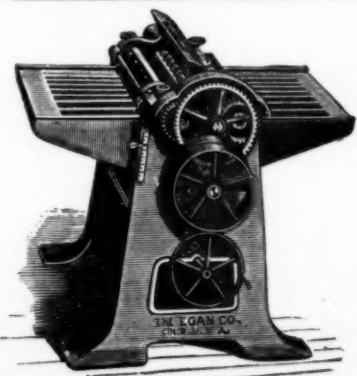
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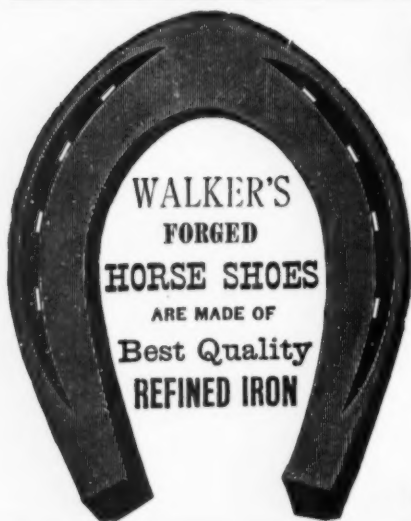
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Brass and Copper.....dis 50 ½

Malleable (Hammer's).....dis 50 ½

PINKING IRONS.

Per dozen.....75 cts. net

PLATING MACHINES.

Astor Plating Machine.....each \$15, dis 20 ½

Crown Plating Machines.....dis 25 ½

6 in.; 8 in.; 10 in. \$8 each.

PLANES AND PLANE IRONS.

Bench, First Quality.....dis 20 ½

Bench, Second Quality.....dis 25 ½

Molding.....dis 15 ½

Bailey's (Stanley R. & L. Co.) New list, Jan. 1879.....dis 20 & 10

The Stanley (S. R. & L. Co.) new list, January 1879.....dis 20 & 10

Bailey's 1879.....dis 20 & 10

Plane Irons, Butcher's.....dis 50 ½

Plane Irons, Auburn Tool Co.....dis 20 ½

Plane Iron, Ohio Tool Co.....dis 20 ½

Plane Irons, Sandusky Tool Co.....dis 20 ½

PLIERS AND NIPPERS.

Button's Patent.....dis 33 ½

Hall's Pat. Compound Lever Cutting Nippers.....dis 25 ½

No. 2, 5 in. \$13 50; No. 4, 7 in., \$21 per doz. dis 25 ½

Gas Pliers.....dis 50 ½

PLUMBS AND LEVELS.

Diston's.....dis 40 ½

Stanley R. & L. Co.'s Pat. Adjustable.....dis 65 & 10

Stanley R. & L. Co.'s Non-Adjustable.....dis 65 & 10

Chapin's Patent Adjustable.....dis 65 & 10

Chapin's Non-adjustable.....dis 65 & 10

Standard Rule Co.'s New Adjustable.....dis 65 & 10

Standard Rule Co.'s Non-Adjustable.....dis 65 & 10

Pocket Levels.....dis 65 & 10

RAIL.

Sliding Door, Wrought Brass.....lb. 43c. dis 30 ½

Sliding Door, Bronzed Wrt. Iron.....ft. 12c. dis 35 ½

Sliding Door, Iron, Painted.....ft. 4c. dis 10 & 10

Barn Door.....inch. 5 ½ 5 ¾ 5 ⅞ 5 ⅝ 5 ⅜ 5 ⅙ 5 ⅕ 5 ¼ 5 ⅓ 5 ⅔ 5 ⅗ 5 ⅚ 5 ⅟ 5 ⅛ 5 ⅞ 5 ⅝ 5 ⅜ 5 ⅙ 5 ⅕ 5 ¼ 5 ⅓ 5 ⅔ 5 ⅗ 5 ⅚ 5 ⅟ 5 ⅛

Per 100 feet.....\$2.60 3.60 5.60-dis 10 ½

B. D. for N. E. Hangers—Small. Med. Large.....dis 10 ½

Per 100 feet.....\$2.10 2.70 .30 net.

RIVETS.

Iron and Tinned, new list, Dec. 10, 1881.....dis 40 ½

In bulk, new list, Dec. 10, 1881.....dis 40 ½

Copper Rivets and Burrs.....dis 45 ½

No. 7 8 9 10 11 12 13 14 15.....dis 45 ½

lb. 49c. 50c. 55c. 54c. 56c. 58c. 60c. 62c. 70c. 75c. 80c. 85c. 90c. 95c. 1.00

RIVET SETS.

Stair, Brass.....dis 25 ½

Stair, Black Walnut.....60c. per doz.—net

RULES.

Boxwood. Ivory.

Chapin's.....dis 70 & 10

Standard.....dis 40 & 10

Stanley.....dis 40 & 10

Stevens & Co.....dis 70 & 10

Ivory.....dis 50 ½

Stevens & Co. Miscellaneous.....dis 50 & 10

SAD IRONS.

Self-Heating, Charcoal.....per doz. 2.00 net

Mrs. Pot's Irons.....dis 35 ½

Enterprise Stir Irons, new list, July 20, '82.....dis 35 ½

Comb'd Fluter and Sad Iron.....dis 15 ½

Common Sad Irons.....25c per lb.

SAND PAPER.

Baeder & Adamson's Flint, 00 & 1 ½.....\$4.50 per r.m.

Baeder & Adamson's Flint, 2, 2 ½ & 3.....5.00 per r.m.

Baeder & Adamson's Flint, Assort'd.....4.75 per r.m.

Baeder & Adamson's Flint, 4, 5 & 6.....3.75 per r.m.

Baeder & Adamson's Emery, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15.....\$6.50 per r.m.

J. Bartle's Sand, Flint and Emery Paper.....dis 30 & 5

SASH CORD.

Common.....lb. 14c. net

Patent.....lb. 17c. @ 18c. net

Silver Braided Lake Hemp.....lb. 50c. dis 10 ½

Silver Braid, Lake White Cotton.....lb. 50c. dis 10 ½

Silver Braided Lake Drab Cotton.....lb. 55c. dis 10 ½

Silver Lake Cable Laid, Bengal Unbleached Hemp, 17 cts.....dis 10 ½

Russian Hemp, 19 cts.....dis 10 ½

Italian Hemp, 34 cts.....dis 10 ½

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Solid Eyes, in 50-lb. lots and over, lb. 1 ¼ c. net

SAUSAGE STUFFERS OR FILLETS.

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Perry.....per doz. No. 15; No. 0, \$2.10-dis 35 ½

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Boynton's Lightning Cross Cuts, new list.....dis 40 ½

Boynton's Circular and Mill.....dis 40 ½

Boynton's Ice.....dis 25 ½

Boynton's Lightning Hand, Panel and Rip.....dis 25 ½

Diaston's Circular.....dis 40 ½

Diaston's Mill.....dis 40 ½

Diaston's Cross Cut.....dis 40 ½

Diaston's Hand, Panel, Rip, &c.....dis 20 ½

Hubbard, Bakewell & Co. Circular Saws.....dis 40 & 5

Hubbard, Bakewell & Co. One-Man's, X Cut.....dis 40 & 5

Hubbard, Bakewell & Co., Mill Saws.....dis 40 & 5

Peace Circular and Mill.....dis 40 ½

Peace Hand, Panel and Rip.....dis 25 ½

Peace Cross Cuts.....dis 25 ½

Peace Band Saws, all widths.....dis 10 ½

Webster Cross Cut, with handles.....dis 25 & 10 & 10

Griffin's Hack Saws and Blades.....dis 30 ½

SAW FRAMES.

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Saw Rods.....per doz. list, dis 10 & 10

SAW SETS.

Stillman's Genuine, per doz. \$3.50 and \$5.50.....dis 10 ½

Stillman's Imitation.....per doz. \$3.25, dis 30 & 10

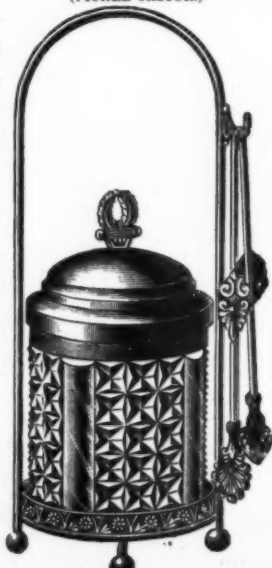
Common Lever.....per doz. \$2.00, dis 30 & 10

Leach's.....No. 0, \$8.00; No. 1, \$15; dis 15 ½

Hammer, Hotchkiss.....\$

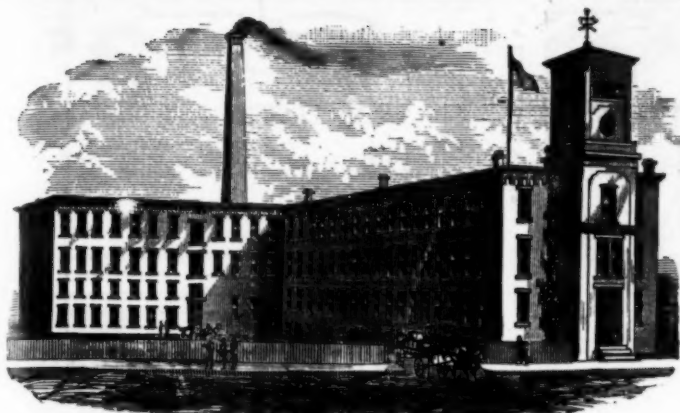
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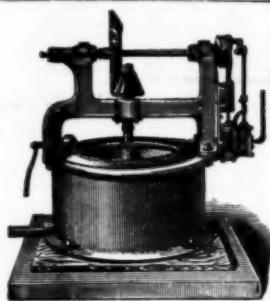
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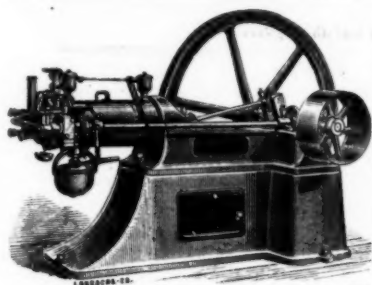


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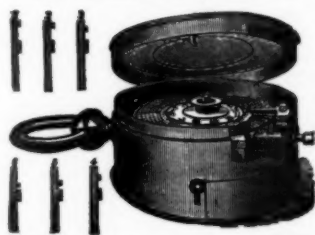
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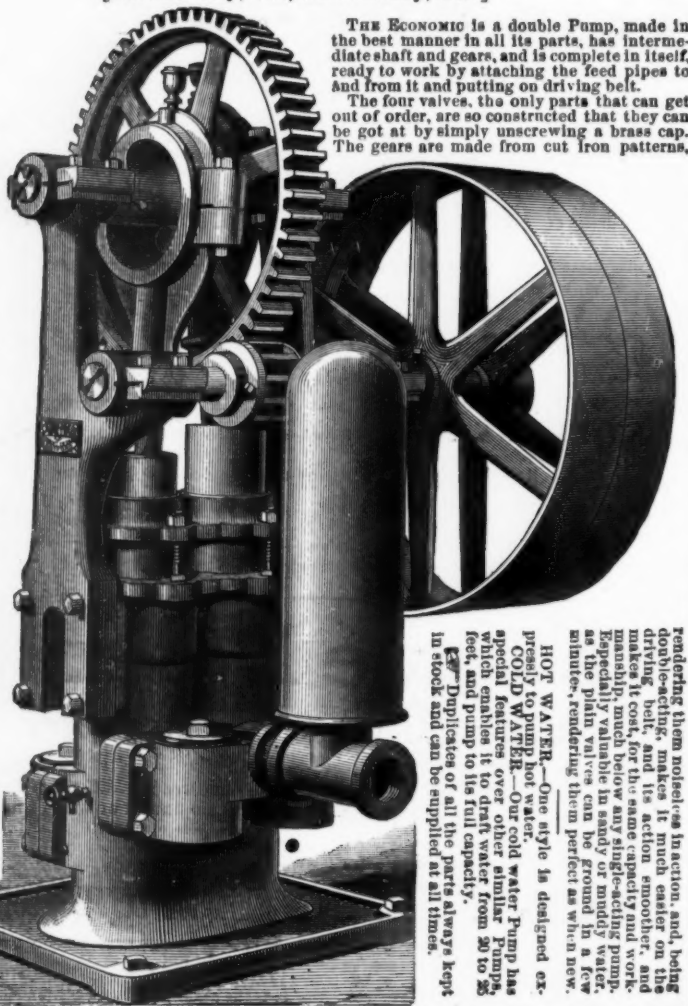
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- 1 each, Hand Lathes, 10, 12, 14, 15 and 18 in. swing.
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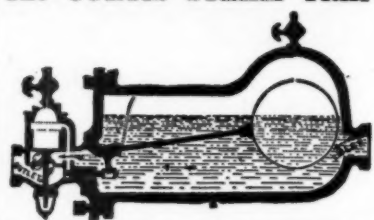
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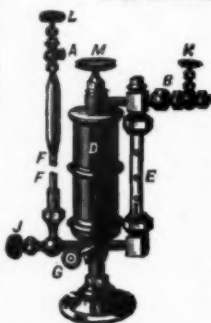
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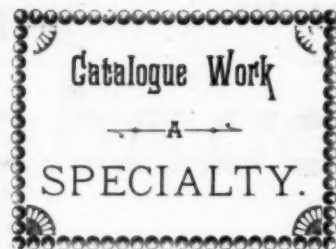
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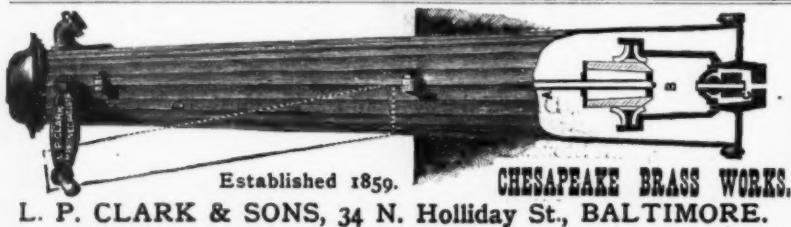
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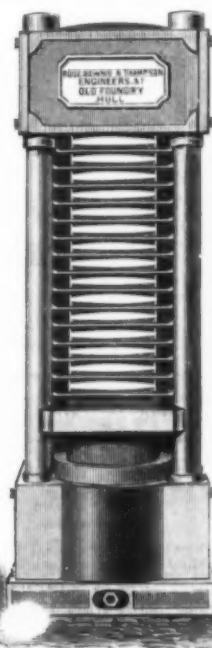
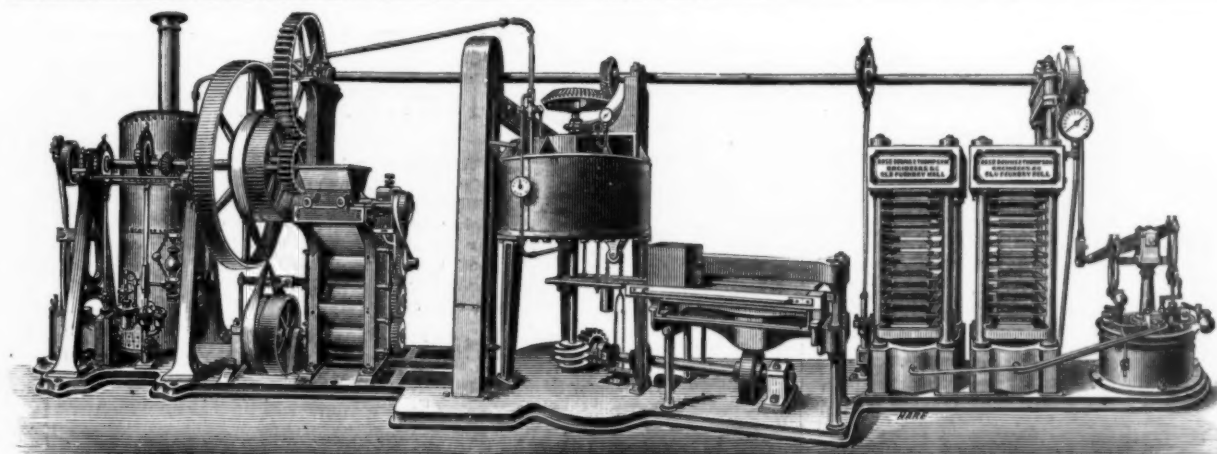
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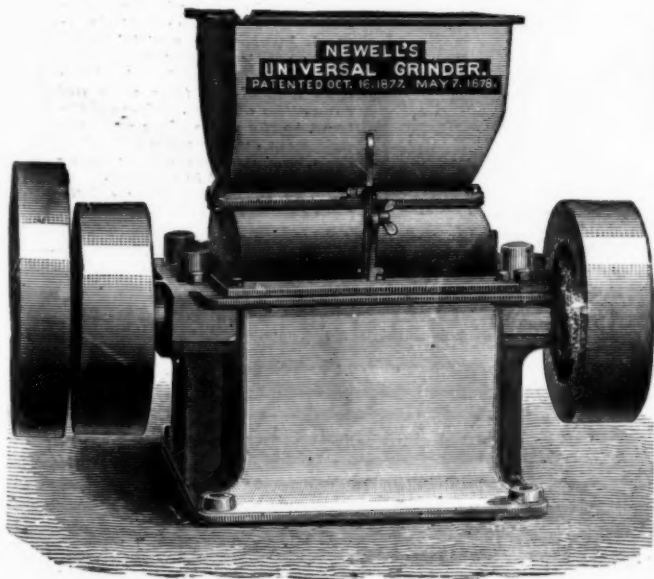
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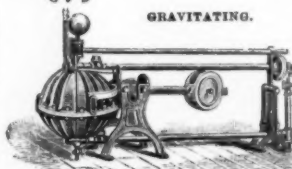
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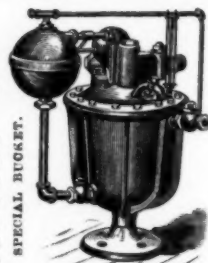


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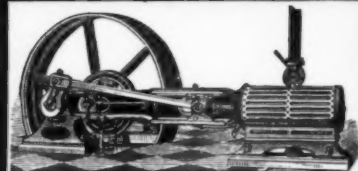
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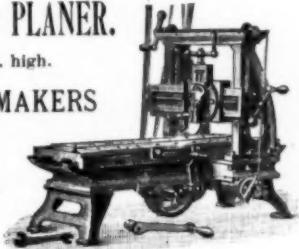
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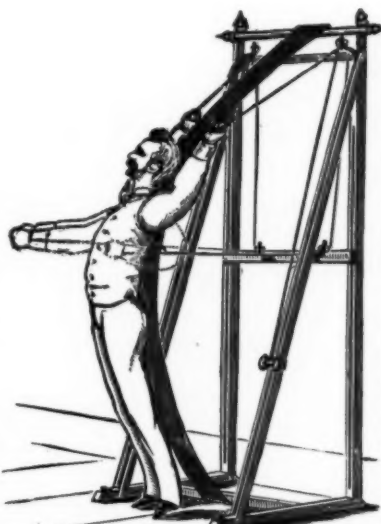


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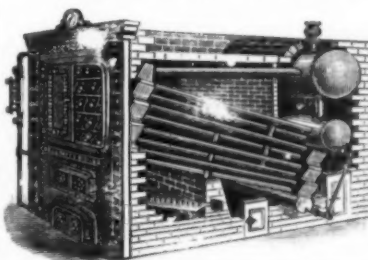
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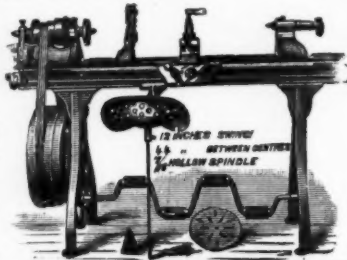
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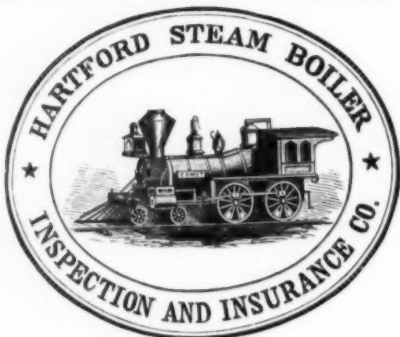
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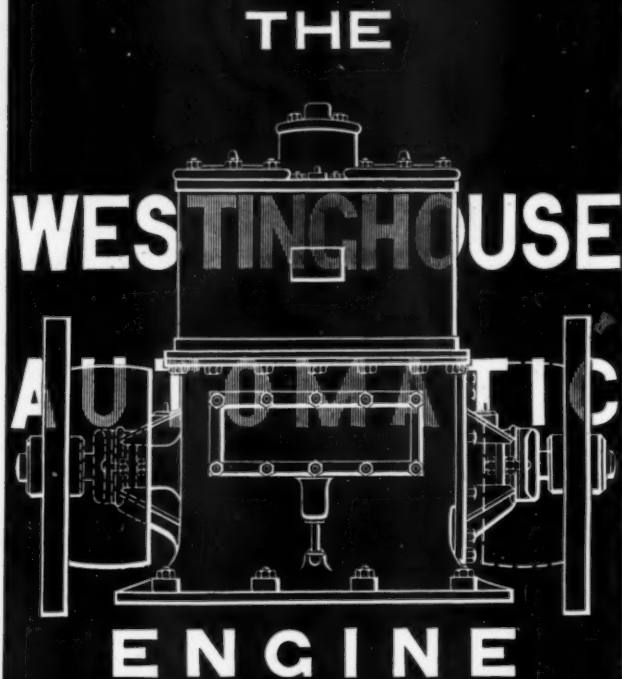
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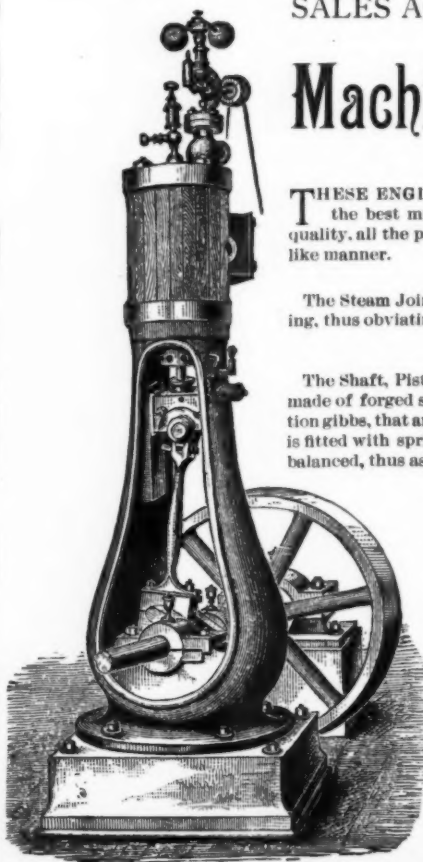
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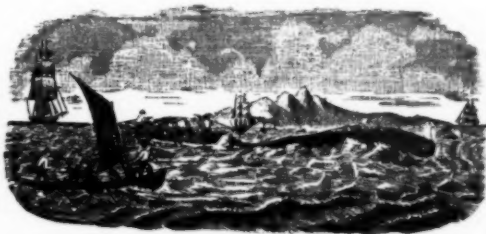
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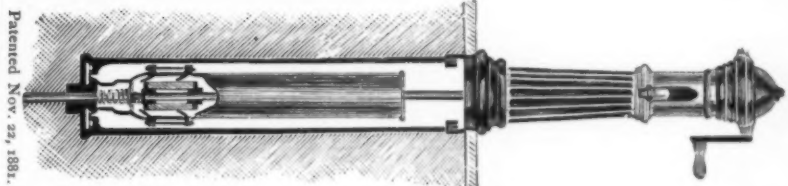
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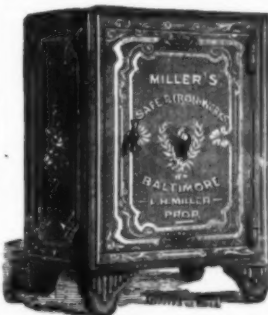
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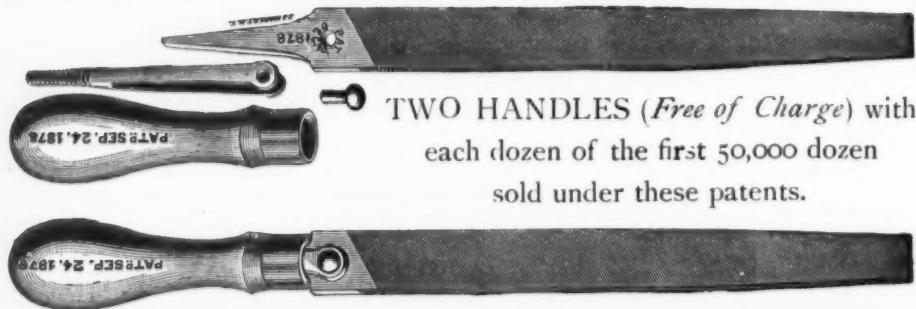
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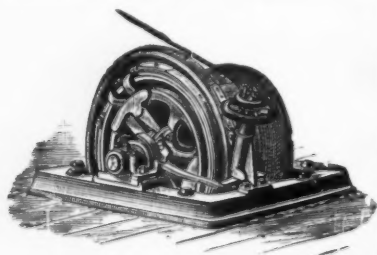
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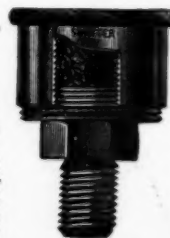
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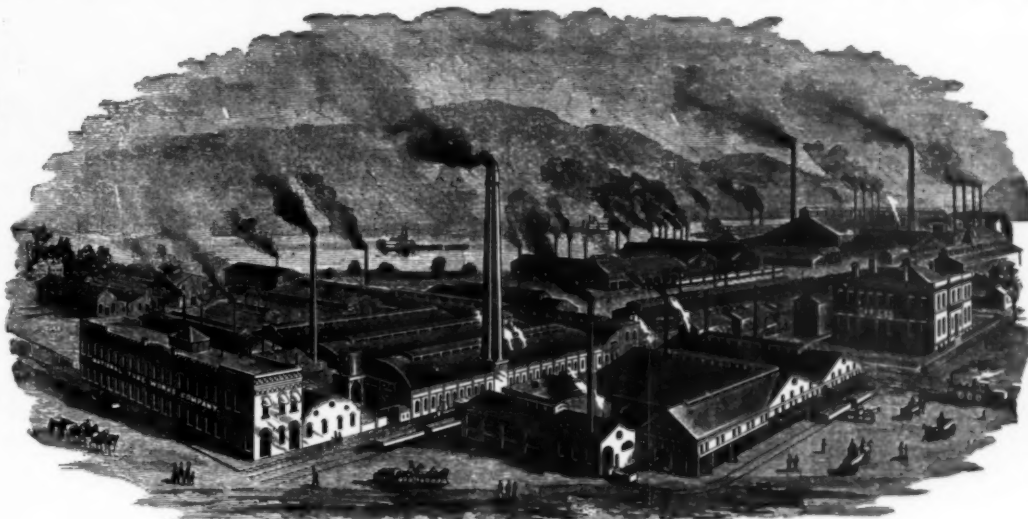
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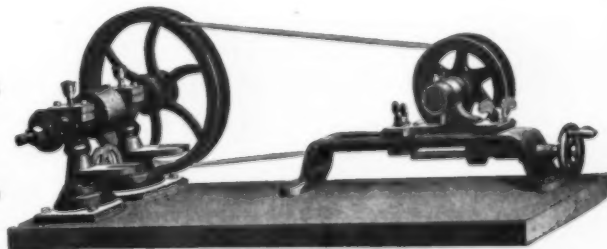
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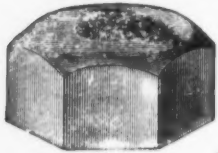


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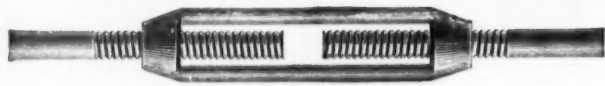
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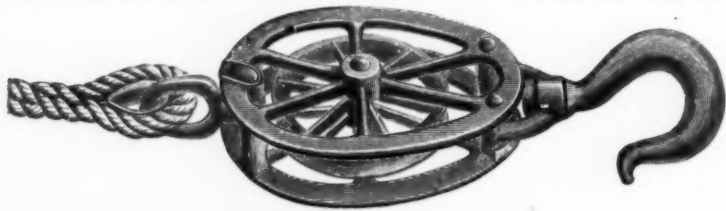
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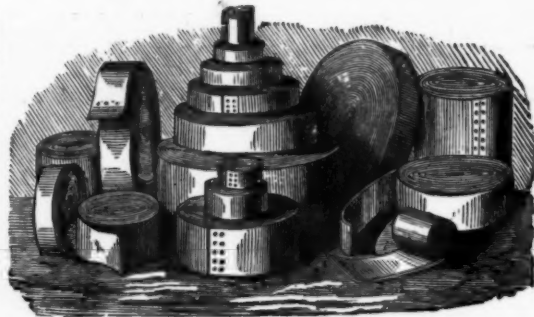


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